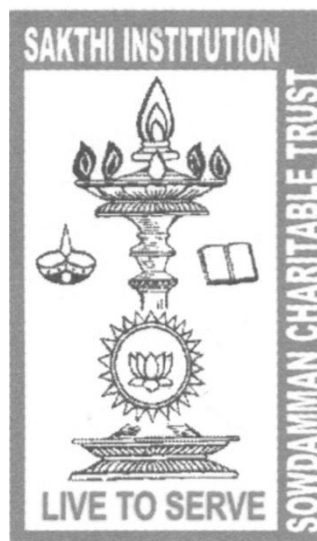


**EFFECTIVENESS OF VIDEO ASSISTED TEACHING PROGRAMME ON  
KNOWLEDGE AND PRACTICE REGARDING PREVENTION OF  
SELECTED WATER BORNE DISEASES AMONG THE  
MOTHERS OF UNDER FIVE CHILDREN IN  
SELECTED AREAS AT DINDIGUL - 2014**



**A DISSERTATION SUBMITTED TO THE  
TAMILNADU DR.M.G.R MEDICAL UNIVERSITY, CHENNAI,  
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS  
FOR THE DEGREE OF  
MASTER OF SCIENCE IN NURSING.**

**APRIL-2014**

**A QUASI EXPERIMENTAL STUDY TO EVALUATE THE  
EFFECTIVENESS OF VIDEO ASSISTED TEACHING  
PROGRAMME ON KNOWLEDGE AND PRACTICE  
REGARDING PREVENTION OF SELECTED WATER BORNE  
DISEASES AMONG THE MOTHERS OF UNDER FIVE  
CHILDREN IN SELECTED AREAS AT DINDIGUL - 2014**

**K.MAHESWARI**

**A DISSERTATION SUBMITTED TO THE  
TAMILNADU DR.M.G.R MEDICAL UNIVERSITY, CHENNAI,  
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS  
FOR THE DEGREE OF  
MASTER OF SCIENCE IN NURSING.**

**APRIL-2014**

## **CERTIFICATE**

This is a bonafide work of **K.MAHESWARI**, from Sakthi College of Nursing, Dindigul, Tamilnadu, India submitted in partial fulfillment for the Degree of Master of Science in Nursing under the Tamil Nadu Dr.M.G.R, Medical University, Chennai.

Signature of the Principal-----

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**A QUASI EXPERIMENTAL STUDY TO EVALUATE THE EFFECTIVENESS  
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## **ABSTRACT**

A study to evaluate the effectiveness of video assisted teaching programme on knowledge and practice regarding prevention of selected water borne diseases among the mothers of under five children in selected areas at Dindigul district was done by Mrs.K.Maheswari as a partial fulfillment of the requirement for the degree of Master of Science in Nursing to the Tamilnadu Dr.M.G.R, Medical University Chennai. During the year 2012-2014.

### **OBJECTIVES OF THE STUDY**

1. To assess the existing level of knowledge and practice regarding prevention of selected water borne diseases among the mothers of under five children in the experimental and control group.
2. To evaluate the effectiveness of video assisted teaching programme on knowledge and practice regarding prevention of selected water borne diseases among the mothers of under five children in the experimental and control group.
3. To find out the relationship between post test knowledge and practice regarding prevention of selected water borne diseases among the mothers of under five children in the experimental and control group.
4. To find out the association between Post test level of knowledge and practice with selected demographic variables in the experimental and control group.

The conceptual frame work was based on Von Bertalanffy general system theory model and Quasi experimental design adopted for the study.

The population was 60, in which 30 were experimental and 30 were in control group. Convenience sampling technique was used. A structured interview questionnaire and observational check list was developed and used for data collection. A video assisted teaching programme was administered to the experimental group and was evaluated.

The collected data were tabulated, analyzed and interpreted. The study findings show that the knowledge and practice of the mothers of under five children in the experimental group increased after the video assisted teaching programme.

The result shows that there was association between knowledge and educational status of mothers of under five children and there were no significant relationship between knowledge, practice and other demographic variables.

The study concludes that the video assisted teaching program can improve both knowledge and practice level among the mothers of under five children on prevention of selected water borne diseases.

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## **CHAPTER I**

### **INTRODUCTION**

**“PURE WATER IS THE WORLD FIRST AND  
FOREMOST MEDICINE” (SLOVAKIAN)**

Water is the most indispensable nature resource in the world for every living being. The entire life-support systems are dependent upon this vital resource. The quality of drinking-water is a powerful environmental determinant of health. Assurance of drinking-water safety is a foundation for the prevention and control of waterborne diseases.

According to **Thivapulavar Thiruvalluvar** said about water “If it be said that the duties of life cannot be discharged by any person without water”.

**Maslow's** hierarchy of basic needs is Air, water, and foods are metabolic requirements for survival in all animals, including humans. In this world India's is covered 70 percent of water surface. Every living thing depends on the water.

Water is most important for maintenance of life it constitutes about 70 percentage of the body weight in children. The total water content of body is comparatively higher in infants than in adults. Water is required for digestion, metabolism, renal excretion, temperature regulation, and transportation of cellular substance, maintenance of fluid volume and growth of children. Safe water is free from organism, chemical substance and pleasant taste. Water is one of the body's most essential nutrients. People may survive six weeks without any food, but they couldn't live more than a week or so without water. That's because water is the cornerstone for all body functions. It helps keep body temperature constant at about 98.6 degrees, and it transports nutrients and oxygen to all cells and carries waste products away.

Adequate supply of fresh and clean drinking water is a basic need for all human beings on the earth, . Industrial growth, urbanization and the increasing use of synthetic organic substances have serious and adverse impacts on freshwater bodies. Many areas of groundwater and surface water are now contaminated with heavy metals, POPs (Persistent Organic Pollutants), and nutrients that have an adverse affect on health.

Today's children are tomorrow pillars. Child health is important for the growth of the country and global development. Mainly drinking water causing the water borne diseases. Under five children need 1.7 L/day of total water. Water is most important to all as it is directly consumed by all living entities. From that point of view, water is particularly related with health.

The safety and accessibility of drinking-water are major concerns throughout the world. Diseases from unsafe water and lack of basic sanitation kill more people every year than all forms of violence, including war. Children are especially vulnerable, as their bodies are less immunity to fight diarrhea, dysentery and other illnesses. 90% of the 30,000 deaths that occur every week from unsafe water and unhygienic living conditions are in children under five years old. The WHO reports that over 3.6% of the global disease burden can be prevented simply by improving water supply, sanitation, and hygiene.

Health risks may arise from consumption of water contaminated with infectious agents, toxic chemicals, and radiological hazards. Improving access to safe drinking-water can result in tangible improvements to health.

Children's health may be affected by the ingestion of contaminated water either directly or by use of contaminated water for the purpose of drinking, personal hygiene and recreation. Water borne diseases are viral, bacterial and parasitic diseases

which use water as a common means of transmission. Knowledge of the route of transmission of waterborne diseases is essential to providing preventive and control measures.

In many countries where sewage treatment is inadequate, human wastes are disposed of in open latrines, ditches, and canals, resulting in extensive diarrheal disease. It is estimated that 4 billion cases of diarrheal disease occur every year, causing 3 million to 4 million deaths, mostly among children. Worldwide, the lack of sanitary waste disposal and not using clean water for drinking, cooking, and washing is to blame for over 12 million deaths a year.

There is a major concern of health care services in developing countries including India. Adding to this, illiteracy, poverty, pollution, over population, made it difficult to render health care services to all. Hence available awareness of the waterborne diseases prevention is the solution to promoting the health of the children.

Food and water borne diseases means the infection by ingestion of an infected organism, usually through contaminated water or food and the sources of infection may vary from person to person, poor hygiene and sewage contamination of water supply (Bhutta, 2007).

The World Health Organization says that,(2005), every year more than 3.4 million people die as a result of water related diseases, making it the leading cause of disease and death around the world. Mainly young children die from illnesses caused by organisms that thrive in water sources contaminated by raw sewage.

Department of health and human services,(2005), centre for disease control and prevention report is globally typhoid fever accounts for about 6,00,000 deaths among under five children And cholera accounts for 2,40,00 death among under five children.

India assessment report 2002 is water supply and sanitation is available from the water resources division, government of India planning commission, New Delhi. 40000 and 50000 children Of under five years die in each year from diarrhea, due to failure to improve personal and home hygiene as a fact.

### **SIGNIFICANCE OF THE STUDY:**

WHO report that (2013) globally, there are an estimated 1.4 million cases of hepatitis A every year. Epidemics can be explosive in growth and cause significant economic losses.

The Global Enteric Multicenter Study (GEMS), published in Lancet, shows diarrheal disease, which is responsible for one in every ten child deaths during the first five years of life. In this world highest rate of incidence in India... (year). Cholera is an acute diarrheal disease that can kill within hours if left untreated. There are an estimated 3–5 million cholera cases and 100 000–120 000 deaths due to cholera every year. Cholera vaccines are considered to control cholera.

Joint Monitoring Programme for Water Supply and Sanitation report in (2013), Diarrhoeal disease is the second leading cause of death in children under five years old. Each year diarrhoea kills around 760 000 children under five. Globally, there are nearly 1.7 billion cases of diarrheal disease every year. Diarrhoea is a leading cause of malnutrition in children under five year.

A recent United Nations report,(2011), says that more than three million people in the world die of water-related diseases due to contaminated water, which includes 1.2 million children. In India, over one lakh people die of water-borne diseases annually.

Cholera outbreaks can occur sporadically in any part of the world where water supplies, sanitation, food safety and hygiene practices are inadequate. Overcrowded communities with poor sanitation and unsafe drinking-water supplies are most frequently affected. Cholera cases and deaths were officially reported to WHO, in the year 2000, from 27 countries in Africa, 9 countries in Latin America, 13 countries in Asia, 2 countries in Europe, and 4 countries in Oceania.

UNICEF report that,(2011), Every year, nearly 11 million children die before reaching their fifth birthday, most from preventable causes. That is approximately, 30,000 children per day. Another 300 million children suffer from illnesses caused by lack of clean water, poor nutrition and inadequate health services and care. Helping families ensure that their children survive and reach school age healthy and well-nourished, safe and confident and ready to learn is at the heart of UNICEF's mission. Working in 158 countries, UNICEF is helping the world achieve the 2015 Millennium Development Goals by making every child's right to survive and thrive our top priority.

The Union Ministry of Health and Family Affairs report that in (2011), the 257 deaths were among the 21,12,308 cases detected. Of this, three people died due to cholera out of the 610 cases detected during the three years. Andhra Pradesh saw four deaths out of 715 cases, while two died in Tamil Nadu out of 1,308 cases. Kerala saw three deaths, out of the 81 cases detected.

World health organization report that,(2010), the association of HAV infection risk with standards of hygiene and sanitation, the age-dependent clinical expression of the disease, and lifelong immunity determine the different patterns of HAV infection observed worldwide.

According to National health profile report(2009), is 1.87 million deaths from diarrhea of children aged less than 5years is estimated 2009 the number of cases reported in India for diarrhea, typhoid and cholera are 5746404, 553664 and 3482 respectively. Mortality cases of Diarrhea, Typhoid and Cholera are 975, 245 and 12 in India.

In this world, 1.1 billion people lack basic access to drinking water resource; 2.4 billion People have inadequate sanitation facilities, related acute and chronic diseases. Some 3.4 million people, many of them are young children die each from waterborne diseases such as intestinal diarrhea, cholera, typhoid .Evidence for water-sanitation and hygiene-related diseases account for some 2,213,000 deaths annually.

The awareness of mothers about waterborne disease and preventive services is a barometer by which we can measure the progress of family, community and country. Lack of awareness can lead to health hazards in country.

UNICEF report (2009) is every year, water borne diseases like diarrhea, cholera & typhoid claim the lives of million of children in developing world. Water & sanitation related disease are one of the major causes of underfive mortality in the world. Every day around 5,000 children die from diarrhea related causes alone. The good news is that by providing access to clear water, basic sanitation & Hygiene education, the diseases which cause these children to become ill and die can be prevented.

National Health profile (2008) report that in India, 191616 cases of typhoid fever, 11231036 cases of acute and 2680 cases of cholera were reported in the year of 2008.In diarrhoeal diseases Tamil Nadu.



The World Health Organization, 2007, has reported that , water borne diseases kill more people than any other diseases in the World. 1.1 billion people globally lack basic access to drinking water resources. While 2.4 billion people have inadequate sanitation facilities, for many water related and chronic diseases. 3.4 million people, many of them young children, die each year from water-borne diseases, such as intestinal diarrhea (cholera, typhoid fever and dysentery), caused by microbically-contaminated water supplies.

FAO report is,(2006), estimated that around 37.7 million Indians are affected by water-borne diseases annually, 1.5 million children are estimated to die of diarrhoea alone, and 73 million working days are lost due to water-borne diseases each year.

Water Sanitation and Health (WSH) report that,(2006), Dr LEE Jong-wook, Director-General, World Health Organization. 1.8 million people die every year from diarrhoeal diseases (including cholera); 90% are children under 5, mostly in developing countries. 88% of diarrhoeal disease is attributed to unsafe water supply, inadequate sanitation and hygiene. Improved water supply reduces diarrhoea morbidity by 21%. Improved sanitation reduces diarrhoea morbidity by 37.5%. The simple act of washing hands at critical times can reduce the number of diarrhoeal cases by up to 35%. Additional improvement of drinking-water quality, such as point of use disinfection, would lead to a reduction of diarrhoea episodes of 45%. There are 1.5 million cases of clinical hepatitis A every year.

UNICEF report(2004), that estimated 400,000 children under five years of age die each year due to diarrhoea. Several million more suffer from multiple episodes of diarrhoea and still others fall ill on account of Hepatitis A, enteric fever, intestinal worms and eye and skin infections caused by poor hygiene and unsafe drinking water.

World wide a total of 1, 31,943 cases and 2,272 deaths were reported from 52 countries in 2005. During 2005 in India , the larger endemic foci of cholera were found in Delhi 945 cases, Tamilnadu 724 cases, and one death, Maharashtra 724 cases, and one death, West Bengal, 235 cases, Andhra Pradesh 165 cases, Karnataka 214 cases and one death, Kerala 27 cases and one death, and Gujarat 92 cases and 2 deaths. Total numbers of cases reported were 3156 with 6 deaths, a case fatality rate of 0.19 percent.

The health professional including nurse & other health workers have an important role is creating awareness of water borne diseases .The nurse in the community can a play vital role is creating awareness among under five mothers through education by frequent interaction with them and enforcing them to consuming hygienic water. And also aware about and prevention of water borne diseases.

The investigator selected the under five mothers as main target group for the study, because taking care of the children among largest populated country like India there is necessity of improving health and propagating health education for comfortable standard of living children. The research studies proved that lack of awareness, poor education etc. Increases the risk of water borne diseases among the children.

The investigator experienced that due to diarrhoeal diseases.Thechildren's are getting complication like growth retardation, malnutrition,and pneumonia.So that the investigator decided to develop and appropriate video assisted teaching program based on their needs for improving knowledge and practice towards theirchildren's health.

Several IEC materials like handouts, pamphlets, cards, Flipchart were developed and shown to Video teaching methods were developed and shown mothers of under five children for improve their knowledge and practice. The materials seems to be working less effective in touching heart and mind of the children's and mothers. Which is vary important to foster their health seeking behaviour. Video assisted teaching programme was developed in such a manor making the mothers to think about their self and children's health.

### **STATEMENT OF THE PROBLEM:**

A Quasi experimental study to evaluate the effectiveness of video assisted teaching programme on knowledge and practice regarding prevention of selected water borne diseases among the mothers of under five children in selected areas at Dindigul district.

### **OBJECTIVES:**

1. To assess the existing level of knowledge and practice regarding prevention of selected water borne diseases among the mothers of under five children in the experimental and control group.
2. To evaluate the effectiveness of video assisted teaching programme on knowledge and practice regarding prevention of selected water borne diseases among the mothers of under five children in the experimental and control group.
3. To find out the relationship between post test knowledge and practice regarding prevention of selected water borne diseases among the mothers of under five children in the experimental and control group.

4. To find out the association between Post test level of knowledge and practice with selected demographic variables in the experimental and control group.

#### **HYPOTHESIS:**

**H<sub>1</sub>** There will be a significant difference in the pre test and post test knowledge on prevention of selected water born diseases among the mothers of under five children.

**H<sub>2</sub>** There will be a significant difference in the pre test and post test practice on prevention of selected water born diseases among the mothers of under five children.

**H<sub>3</sub>** There will be a significant relationship between knowledge and practice on selected water born diseases among the mothers of under five children.

**H<sub>4</sub>** There will be significant association between post test knowledge with the selected demographic variables.

## **OPERATIONAL DEFINITIONS:**

### **Effectiveness:**

In this study refers to the outcome of video assisted teaching programme among mothers of under five children it is measured in terms of difference in pre test and post test score of selected water borne diseases.

### **Knowledge:**

In this study it refers to the verbal response of mothers of under five children regarding knowledge of prevention of selected water borne diseases assessed by a structured interview questionnaire.

### **Practice:**

This refers to the need for the development and implementation of a holistic range of systems in order to develop the practice as assessed by observational check list.

### **Waterborne diseases:**

It refers to action which halts the occurrence of diseases by contaminated water.

### **Mothers of under five children:**

It refers to the mothers who have the children between the age group of 0-5 years.

## **ASSUMPTION**

1. Mothers of under five children will have some basic knowledge about selected water born diseases.
2. The knowledge and practice of mothers of under five children will influence their practices of prevention and management of selected water born diseases.
3. Health education at regular intervals will improve their knowledge and promotes adequate practice among the mothers of under five children regarding for prevention and management selected water borne diseases.
4. Demographic variables of mothers of under five children may or may not influence knowledge and practice of prevention of selected water borne diseases.

## **DELIMITATIONS**

1. The data will entirely be dependent on the verbalized responses of the respondents.
2. This study includes mothers of under five children who are familiar with Tamil language.
3. This study is confined to selected geographical area of Dindigul.

## **PROJECTED OUTCOME**

The findings of study would help to identify the level of knowledge and practice of mothers of under five children about selected water borne diseases.

The development of the video assisted teaching programme would be help to improve knowledge and practice among mothers of under five children for prevention of selected water borne diseases.

The use of the video assisted teaching programme will enable the learner to grasp the information more easily and its remains in their mind for longer.

## **CONCEPTUAL FRAMEWORK**

The conceptual framework of the present study was developed by the investigators based on Von Bertalanffy's General system theory of learning (1968). A system is set of interrelated parts that comes together to form a "whole". Each part is necessary to make a complete, meaningful whole. This consists of component like

- Input
- Throughput
- Output
- Feedback

In the present study, focused on water borne diseases among the mothers of under five children were considered as an open system because they receiving information from the environment. The system uses this input to maintain homeostasis.

### **Input**

The first component of a system is input, which is the information, energy or matter, which enters a system. For a system to work well input should contribute to achieve the purpose of the system. It refers to demographic data of mothers of under five children (age, no of children, education, and type of the family, income, availability of mass media, sources of water, surrounding the drinking water, and previous history) pretest and post test knowledge on water borne diseases. Video teaching program on water borne diseases regarding definition, causes, mode of

transmission, signs and symptoms, complication, management and prevention. These factors were taken into consideration as input for assessing the knowledge and practice of mothers of under five children.

### **Throughput/Process**

It is the process that allows the input to be changed, so that is useful to the system. The action needed to accomplish the desired task. The task is to implement video assisted teaching program to assess the level of knowledge and practice regarding water borne diseases among the mothers of under five children.

### **Output**

Based on the input and throughput, the system returns output to the environment in an altered state, the end result or product of the system. Outputs vary widely depending on the type and purpose of the system affecting the environment. Therefore the output refers to the adequacy of knowledge, and practice among of mothers of under five children. Level of knowledge was interpreted as adequate, moderately adequate, and inadequate and the level of practice adequate, moderately adequate, and inadequate.

### **Feedback**

It refers to determine whether or not the end result of the system has been achieved. Feedback emphasizes the effect of the input, throughput and output. It shows that female sex workers obtained whether adequate knowledge or moderate knowledge or inadequate knowledge and positive practice adequate, moderately adequate, and inadequate.



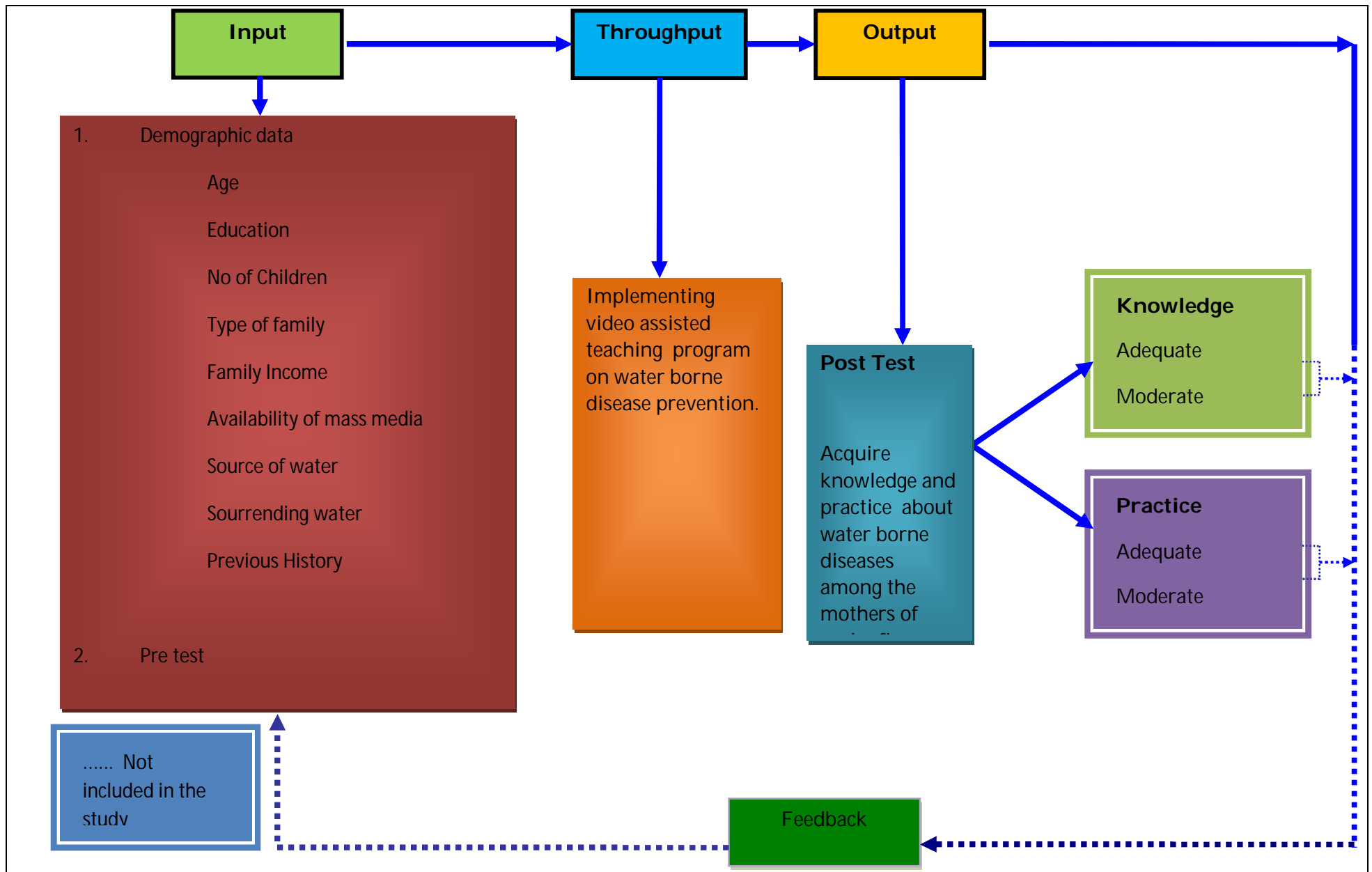


FIGURE 1 CONCEPTUAL FRAMEWORK BASED ON VON BERTANLANFFY'S GENERAL SYSTEM THEORY (1968)

## **CHAPTER - II**

### **REVIEW OF LITERATURE**

Review of literature is an essential step in the development of a research project. It involves the systematic identification, location, scrutiny and summary of written materials that contains information on a research problem. The investigator reviewed the related literature to broaden the understanding and gain insight into the selected problem under the study.

A good research does not exist in the vacuum. The research findings should be an extension of previous knowledge and theory as well as a guide for future research activity. A thorough study of literature provides a foundation to base new knowledge. A review of literature provides the concept to continue or return for the contemplated research, an understanding of the status of research in the problem area and clues the research approach, method, instrumentation, and analysis.

The literature reviews organized under the following headings.

- Studies related to knowledge and practice regarding causes, prevention and management on water borne diseases
- Studies related to intervention programme on water borne diseases.

#### **I. STUDIES RELATED TO KNOWLEDGE AND PRACTICE REGARDING CAUSES, PREVENTION AND MANAGEMENT ON WATER BORNE DISEASES.**

**N.Sumathi, (2012),** Salem, This study was descriptive design with cross sectional survey method to assess the knowledge of the mother on prevention of food and water borne diseases of under five children in Rajapalayam panchayat.104

mothers were selected by convenient sampling technique and used structural interview schedule. The result shows that no significant association was found between mothers and knowledge and demographic variable such as age, educational status, occupation, family income, type of family ,religion and previous sources of information it reveals that the average knowledge of mothers irrespective of their demographic variable.

**Masangwi SJ.et.al ,(2012)**,Center for Water, Sanitation ,Health and Appropriate Technology Development (WASHED),University of malvai, This study was conducted the mothers knowledge on diarrheal etiology , clinical failure and prevention. This result shows that less likely to give correct answer.Though that education knowledge level is low to understanding of diseases.

**Bhattacharya .M, et.al ,(2011)** ,Indian journal of preventive social medicine, in Madhya Pradesh. This study was conducted to assess the knowledge and practice regarding water handling, sanitation and defecation practices. Mothers were selected by using questionnaire in 10 villages of 2 blocks. The result showed that existing knowledge regarding safe water, sanitation and hygienic behavior was very low in luchvar comparing other block.

**Mwambete KD, et.al, (2010)**, Department of pharmaceutical microbiology, in TemekeMunicipality.A cross sectional study was conducted regarding knowledge and perception of mother of under five childhood diarrheal risk factor 161 mothers were interviewed and semi structure questionnaire was used. 74 (46%) had female and 87(54%) had male with in age 2 years mothers knowledge was poor correlated with educational level only 31% we aware of risk factor for diarrhea.

**Borooat VK, (2004)**, School of economics and politics in Northern Ireland conducted the study for in india data over 13000 children .This paper examines the

quality of water supply, mother literacy, housing conditions related to diarrhea. The paper highlights the hygiene practice such as hand washing with soap before feeding a child. The result is literate peoples only promoting domestic hygiene.

**Mbonye AK, (2004)**, Department of community Health, Uganda, This study was conducted for 300 women and cluster sampling technique. The prevalence of diarrhea was 40.3 %. The child not immunized (2.8.p< 0.001), absence of latrine in a house (1.4 p<0.03), low knowledge of washing hands after using latrine (1.8 p<0.03) and washing hands before preparing food (1.4 p<0.04) were risk factor for diarrhea. The result showed that low knowledge in immunization services, personal and environment hygiene.

**Sheth mini and Obrahmonika (2004)** Conducted a study in Gujarat in India.200 mothers were selected. It reveals that contaminated water and food is important role in the etiology of diarrhea. Most of the households (50.5%) had poor rating for environmental sanitation. Personal hygiene was poor (38.5%) to average (30.5%).

**Melanie Nielse (2001)** conducted a study on childhood diarrhea and hygiene regarding mothers perception and practices in the Punjab.200 households from 10 village were selected by random sampling method the mother revealed causes of diarrhea is too much food 66% ,contaminated food 26 % , contaminated water 4% ,flies 2% other 2% do not know the causes. This results shows mother knowledge is only 5 (2.5%) mentioned the need for a toilet for hygienic purposes few mentioned germs and not boiling the water. This indicates lack of knowledge regarding causes of diarrhea.

**Dalla V.et.al, (2001).**Conducted a study on maternal knowledge and practices towards diarrhea in Maharastra, among 75 mothers relocated that nearly half of the

mother were not practicing adequate hand washing ,90.7 % know about ORS solution and but 60% practiced . This result shows that maternal knowledge related to diarrhea and ORS solutions is very low.

**Mercy Thomas, (1999)**,Conducted a study in Mangalore, regarding oral fluid and food intake in urban area in low socio economic status and joint family. Mother had only 50 % of the knowledge and diet and oral fluid to be giver. This study result shows that mother had poor knowledge regarding foods to be given and avoided foods. Poor knowledge regarding fluids to be given 44.8% but knowledge on preparation of ORS package was severely lacking.

**Khamgaonar MB, et.al,(1999)**, Development of preventive and social medicine, Government Medical College,Nanded. This study was conducted for 635 mothers of under five children regarding home management of diarrhea 48.5%.The result shows that mothers were unaware of any method of rehydrating the child with diarrhea, though that the knowledge level is low.

**GHOSH S.et.al, (1997)**, Calcutta, This study was conducted maternal behavior related to child care practices with 108 mothers (case families) and 72 mothers (control families) used logistic regression model .The result show that higher incidence behavior is non use of soap for feeding container (2.61), Water storage in wide –mouthed containers (2.75), use of bond water (2.36\_ and disposal of children's stool (1.99).

## **II. STUDIES RELATED TO INTERVENTION PROGRAMME ON WATER BORNE DISEASES.**

**Mukhtar Ansari.et.al, (2012)**, Tropical journal of pharmaceutical research .Nepal. This interventional study was conducted to assess the knowledge and practice

through educational intervention between 2010 to 2011. Multistage random sampling approach was used for 630 subjects were randomly assigned to test and control groups. The test group was provided educational intervention majority mothers 62% were not educated. This result shows that educational intervention score median score of knowledge and practice increased from 14, 7, 6 to 26, 9, 13, respectively due to repeated interventions.

**Nagarathinam,(2009), Coimbatore** quasi experimental study was undertaken to assess the effectiveness of video assisted programme on knowledge regarding house hold management strategies among 60 sanitary workers in municipal corporation, Coimbatore. Samples were selected by simple random sampling method. Data was collected by interview method using structure questionnaire and five point likert scale. Data was analyzed using descriptive and inferential statistics. The study result showed increased level of knowledge in post test.

## **CHAPTER III**

### **METHODOLOGY**

This Chapter deals with includes research approach, research design, setting of the study, population, sample and sample size, sampling technique, and plan for data analysis.

#### **RESEARCH APPROACH**

The research approach used for the study is evaluative approach.

#### **RESEARCH DESIGN**

The research design was adopted for this study is experimental design, with one group pre test, intervention and post test (experimental group). Then another group is pre test, no intervention and post test (control group).

#### **SETTING OF THE STUDY**

The study was conducted in K.Pudukottai and Alagupatti villages which are situated at distance tenkilometer and twenty kilometer from sakthi college of nursing,sakthinagarrespectively.The total population of K.Pudukottai and Alagupatti 1100 and 850 respectively mothers of under Five in K.Pudukottai were included in the experimental group and mothers of under five in Alagupatti village is the control group. The investigator arbitrarily choose two distinct villages to prevent study contamination, keeping in mind the geographical distance, time available for data collection and familiarity in the area.

## **POPULATION**

Target population was mothers of under five children. The accessible population was mothers of under five children those who are residing in K.Pudukottai and Alagupatti.

## **SAMPLING TECHNIQUE**

In this study convenience sampling method was used to select samples.

## **SAMPLE**

Mothers of under five children as sample in this study.

## **SAMPLE SIZE**

The study samples were the mothers of under five children living in K.Pudukottai and Alagupatti. The sample included 30 mothers of under five children in experimental group and 30 mothers of under five children control in group.

## **CRITERIA FOR THE SAMPLE SELECTION**

The samples were selected based on the following Inclusion and exclusion criteria.

### **INCLUSION CRITERIA**

1. Mothers of under five children who are residing in and around K.Pudukottai and Alagupatti at the time of data collection.
2. Mothers who are respond in Tamil.

### **EXCLUSION CRITERIA**

Women who were not willing to participate in this study.



## **DESCRIPTION OF THE INSTRUMENT**

After an intensive library and internet search and consultation with experts, a structured interview schedule was developed to measure the knowledge on prevention of selected waterborne diseases among the mothers of under five children. The structured interview a schedule has four parts.

### **Part- I**

It includes demographic characteristics such as, age, education, no of children, type of family, family income, availability of mass media, source of water facility for drinking, condition of the surroundings in the drinking water.

### **Part –II**

This consists of a questionnaire knowledge related to prevention of selected waterborne diseases among the mothers of under five children which consists of 35 multiple choice questions following aspects Introduction of water -3,Uses of water - 1,Contamination of water-1,Prevention of water contamination-1,Introduction of water borne diseases-5,Diarrhea-Definition, causes, signs and symptoms, anagement, complications and prevention-6,Typhoid-Definition, causes, signs and symptoms, management, complications and prevention-6, Hepatitis-A -Definition, causes, signs and symptoms, management, complications and prevention-6,Cholera- definition, causes, signs and symptoms, management, complications, prevention-6.

### **Part-III**

It consists of observation check list in dichotomous questionnaire method used to observe the practices regarding prevention of water borne diseases among the mothers of under five children. It consists of 15 statements.

## **SCORING PROCEDURE**

### **Part –I**

It includes information regarding age, education, marital status, no of children, type of family, family income, availability of mass media, source of water facility for drinking, prevalence of diseases.

### **Part II**

The correct response to the items in part II to assess the knowledge related to prevention of selected water borne diseases among mothers of under five children was given in a numerical score. The maximum possible knowledge score was 100. A score of (1) was giving to every correct response and a score of zero is given to wrong and don't know responses. All question had more than one correct response for the purpose of the study, the knowledge score was classified as follows

0-50%     --inadequate knowledge

51-75%    --moderate knowledge

76-100% --adequate knowledge

### **PART III**

It include statements on practice among the mothers of under five children regarding prevention of selected water borne diseases there are totally 15 statements. Each statements are formal in a dichotomous questionnaire. Each yes response scored in one mark. The maximum score for practice of mothers of under five children in 15 marks practice score was interpreted as follows.

The Scores were interpreted as follows:

<b>Level of practice</b>	<b>Score</b>	<b>Percentage</b>
Adequate	11-15	68-100%
Moderately adequate	6-10	34-67%
Inadequate	0-5	0-33%

## **VALIDITY AND RELIABILITY OF TOOL**

The questionnaire was developed by the investigator with help of extensive literature review and expert opinion. Expert opinion was obtained to confirm the content validity tool was obtained from 9 nursing's experts, one statistics expert and two medical officer. The experts were requested to check the relevance, sequence and adequacy of the items in the interview schedule. Based on their valid suggestion a few items were modified and final tool was prepared as per the suggestions given by the experts. The tool of Tamil translation validated by Tamil expert.

Reliability of the tool was established through test-retest method. After administration tool 30 mothers( 20 % of the sample population ) After a gap a week, the retest was given.

The karl parson's co efficient of co relation was computed and reliability for knowledge was found to be 0.97% and the reliability for practice was found to the 0.99%. The tool was found to be reliable.

## **VIDEO ASSISTED TEACHING PROGRAMME**

The investigator made video assisted teaching programme with review of literature and with the expert's opinion. The content of video assisted teaching programme includes introduction of water, functions of water, water contamination, prevention of water contamination, water borne diseases, Definition, causes, signs and

symptoms, management, complications of diarrhea, typhoid, hepatitis-A and cholera and prevention of these diseases. The average time taken for the programme was around 45 minutes. The time taken for the administration of video assisted teaching programme was 45 minutes including 15minutes of discussion.

## **PILOT STUDY**

The Pilot study was conducted at K.Pudhur among three mothers of under five children in control group and 3 mothers of under five children in experimental group. To evaluate the effectiveness of video assisted teaching programme and to find out the feasibility of conducting main study. The structure interview schedule was used for data collection through the personal interview. The time taken to complete tool was found to be satisfactory in the terms of simplicity and clarity. The administration of the tool and intervention through video assisted teaching programme were implemented. The feasibility with regards to the availability of the sample and cooperation of respondents, accessibility of setting and financial requirement was established. Pilot study helped the investigator to confirm the feasibility of carrying out of the main study.

## **DATA COLLECTION PROCEDURE**

The data was collected among the mothers of under five children for a period of six weeks except Sunday, before commencing the project the permission was obtained from the primary medical officer. And given permission letter to the investigator established rapport with study subject and purposes of study was explained to each subject. The written consent was received from each participant. Investigator made visit to K.Pudukkottai and Alagupatti rural area of Dindigul district. Conducted survey among 60 mothers of under five children respectively.

During this study the options are read one by one. Tick mark was placed over the answer as soon as the person responded. They did not understand the either questions or the response it was repeated to them.

The data collection procedure was held in two phases control group in the first phases knowledge and practice on prevention of selected water borne diseases assessed. During the second phases post test was administered to the same group the same structured interview schedule after one week.

The data collection procedure was held in three phases in experimental group in the first phase's knowledge and practice on prevention of selected water borne diseases assessed. During the second phases video assisted teaching programme was administered among mothers of under five children in K.Pudukkottai. The video was run around 30 minutes. At the end of video programme, content of the programmed was discussed among the group for other 15 minutes, the post test was administered to the same group the same structured interview schedule after one week of video assisted teaching programme.

All the subjects were very much cooperative and investigator expressed her attitude for their cooperation.

#### **DATA COLLECTION SCHEUDLE**

<b>DURATION</b>	<b>ACTIVITY</b>	<b>NO OF CLIENT PER DAY</b>
10.06.2013 to 15.06.2013	pre test done in experimental group	6
17.06.2013 to 22.06.2013	pre test done in control group	6
24.06.2013 to 29.06.2013	Video teaching for experimental group	6
01.07.2013 to 06.07.2013	Post test in experimental group	6
08.07.2013 to 13.07.2013	Post test in control group	6

## **PLAN FOR DATA ANALYSIS**

The data was analyzed in terms of the objectives of the study using descriptive inferential statistics, the plan data analysis was follows,

1. Organize the data in a master data sheet.
2. Frequency and percentage distribution review used to analyze the demographic data for mothers of under five children.
3. Frequency and percentage distribution were used to assess the level knowledge and observe the practice of prevention of selected waterborne diseases.
4. Mean, mean percentage, standard deviation and inferential measures, T test used assess and compare the pretest and post test knowledge and practice.

## **PROTECTION OF HUMAN RIGHTS**

A formal concern was obtained from the respondents of the study (Mothers of under five children) before administering the interview schedule. The investigator explained objectives purpose and goal of the present study to the village leader, medical officer for respective of PHC in order get the maximum cooperation.

## **CHAPTER IV**

### **DATA ANALYSIS AND INTERPRETATION**

This chapter deals with the analysis and interpretation of the data. The data were collected through structured interview questionnaire and check list among the mothers of under five children regarding prevention of selected water borne diseases. This result was computed using descriptive and inferential statistics based on the objectives of the study. The findings of the study of presented in this chapter under the following headings.

- Section I -** Demographic variables of mothers of under five children in the experimental and control group.
- Section II -** Knowledge and practice of mothers of under five children regarding the prevention of selected water borne diseases in the experimental and control group.
- Section III-** Effectiveness of video assisted teaching programme on knowledge and practice of mothers of under five children regarding the prevention of selected water borne diseases in the experimental and control group.
- Section IV-** Relationship between post test knowledge and practice of mothers of under five children regarding the prevention of selected water borne diseases in the experimental group
- Section V-** Association between post test knowledge and practice with selected demographic variables mothers of under five children in the experimental group.

**TABLE 1.a**

**SECTION I : DEMOGRAPHIC VARIABLE OF MOTHERS OF UNDER FIVE CHILDREN**

Distribution of mothers of under five children according to demographic variables in the experimental and control group n=60

S.NO.	Demographic variable	Experimental Group (30)		Control Group (30)	
		N	%	N	%
<b>1.</b>	<b>Age</b>				
	Below 20 years	8	27	12	40
	20-30 years	15	50	12	40
	30-40 years	7	23	6	20
<b>2.</b>	<b>Educational status :</b>				
	Illiterate	8	27	10	33
	Primary school	9	30	11	37
	Middle school	10	33	5	17
	High school	2	7	4	13
	Above High school	1	3	-	-

Table 1a. Reveals that in the experimental group the majority 15(50%) Mothers of under five were in the age group of 20 to 30 years. In control group reveals the majority 12(40%) mothers of under five children belongs to the age group 20 to 30 years and 12(40%) below 20 years.

Regarding the educational status majority 10(33%) were belongs to the mothers of under five children in experimental group. In the control group majority 11(37%) of the mothers of under five children.



**TABLE 1.b**

		n=60			
S.NO.	Demographic variable	Experimental Group (30)		Control Group (30)	
		N	%	N	%
<b>3.</b>	<b>No. Of children:</b>				
	1	15	50	12	40
	2	14	47	13	43
	3	1	3	5	17
<b>4.</b>	<b>Type of family:</b>				
	Nuclear	17	57	21	70
	Joint	13	43	9	30
	Extended family	-	-	-	-
<b>5.</b>	<b>Family income:</b>				
	< 1000	-	-	-	-
	1001>3000	7	23	10	33
	3001>5000	19	63	14	47
	>5000	5	17	6	20

In table 1 b reveals that no of children majority 14(47%) were two children in experimental group. In control group majority 13(43%) were two children. In experimental group reveals in majority 17(57%) had nuclear family 21(70%) had joint family. In experimental group majority 19(63%) had family income. in control group 14(47%).

**TABLE 1.c**

n=60

S.NO.	Demographic variable	Experimental Group (30)		Control Group (30)	
		N	%	N	%
<b>6.</b>	<b>Mass media at Home:</b>				
	Radio	-	-	-	-
	TV	23	77	26	87
	Newspaper	-	-	-	-
	Radio & TV	7	23	4	13
	Others	-	-	-	-
<b>7.</b>	<b>Source of water:</b>				
	Tap	2	7	2	7
	Hand pump	-	-	-	-
	Well	-	-	-	-
	Tap & hand pump	7	23	10	33
	Tap & well	1	3	12	40
	Hand pump & well	3	10	4	13
	Tap, hand pump & well	17	57	2	7
	Pool	-	-	-	-
	River	-	-	-	-

In table 1c reveals that experimental group mass media majority 23(77%) had TV. In control group majority 26(87%) had TV.

In experimental group reveals that sources of water majority 17(57%) using tap, hand pump and well .In control group majority 12(40%) using tap and well.

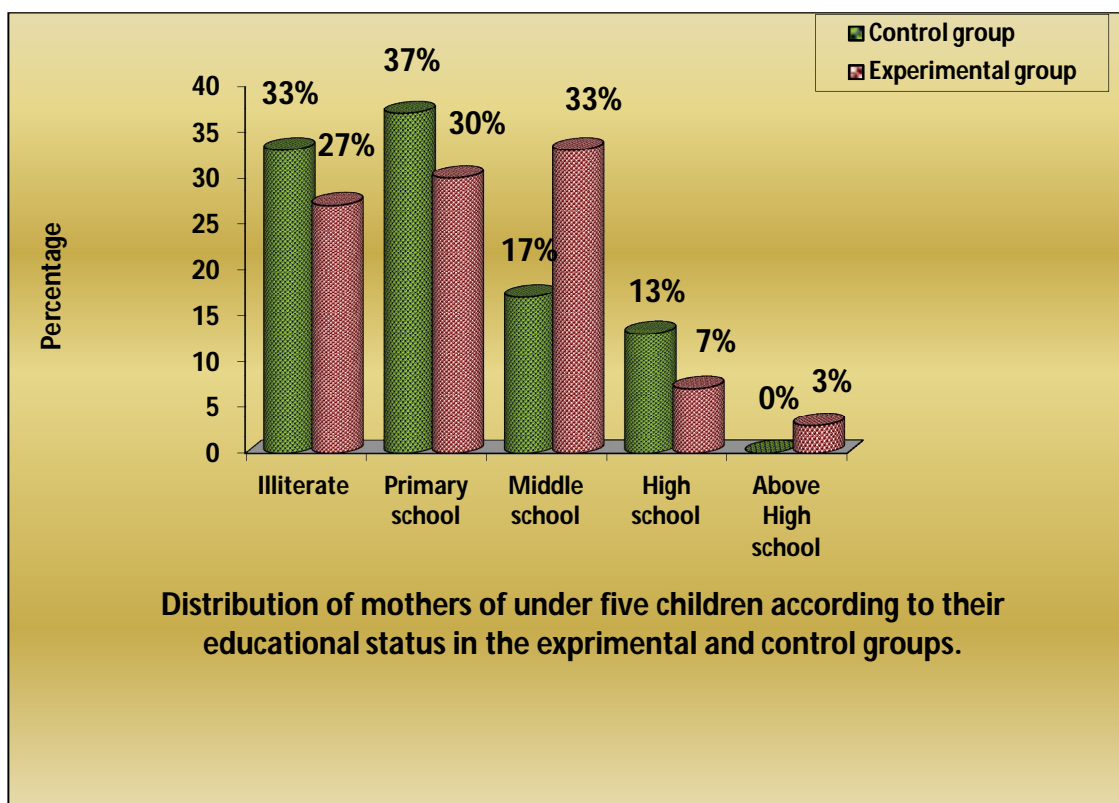
**TABLE 1.d**

		n=60			
S.NO.	Demographic variable	Experimental Group (30)		Control Group (30)	
		N	%	N	%
<b>8.</b>	<b>Surrounding the drinking water:</b>				
	Drainage	10	45	6	50
	Dustbin	5	23	5	42
	Open defecation	5	23	1	8
	Drainage & dustbin	2	9	-	-
<b>9.</b>	<b>Is there any history of:</b>				
	Diarrhea	12	86	7	78
	Typhoid	-	-	-	-
	Hepatitis	1	11	-	-
	Cholera	-	-	-	-
	Diarrhea & typhoid	2	14	1	11

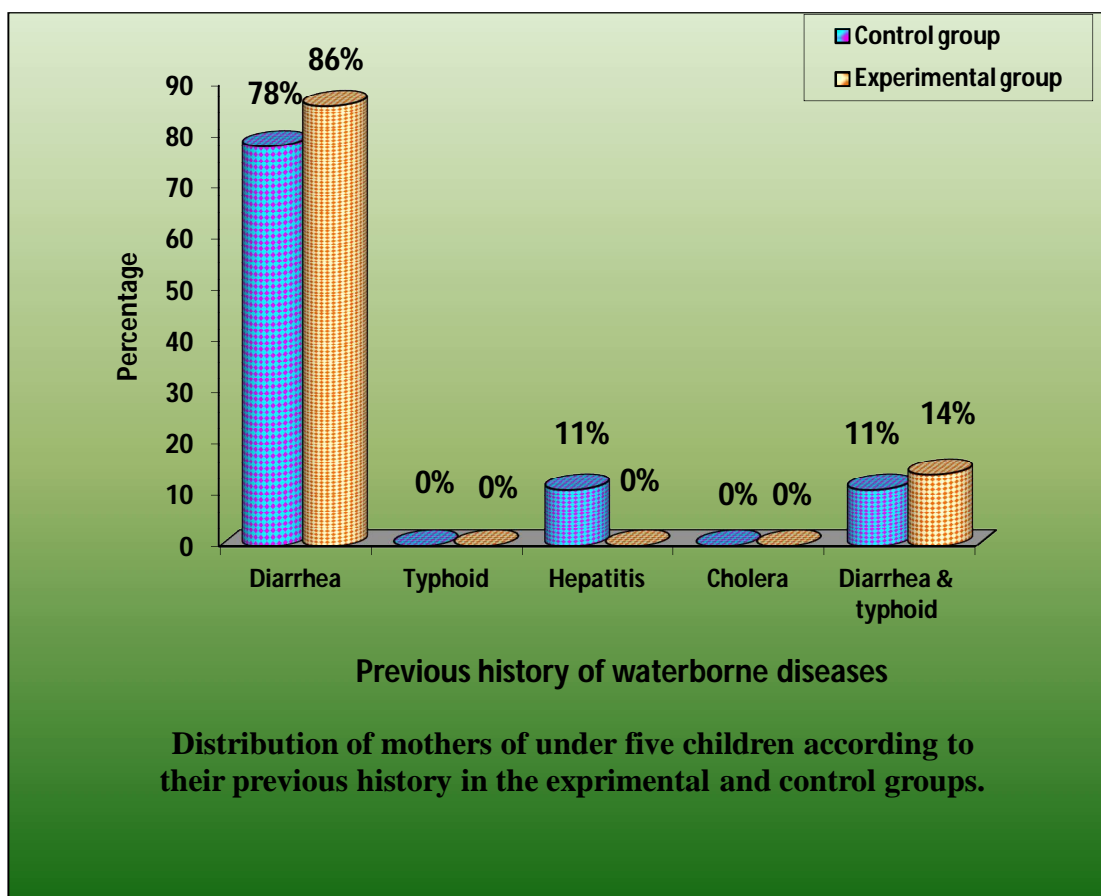
In table 1d reveals that experimental group surrounding the drinking water majority 10(45%) had drainage in control group 6(50%) had dust bin.

In experimental reveals that majority 12(86%) had diarrhea. In control group 7(78%) had diarrhea.

**FIGURE -2**



**FIGURE-3**



## SECTION II KNOWLEDGE AND PRACTICE OF MOTHERS OF UNDER FIVE CHILDREN REGARDING THE PREVENTION OF SELECTED WATER BORNE DISEASES IN EXPERIMENTAL AND CONTROL GROUP

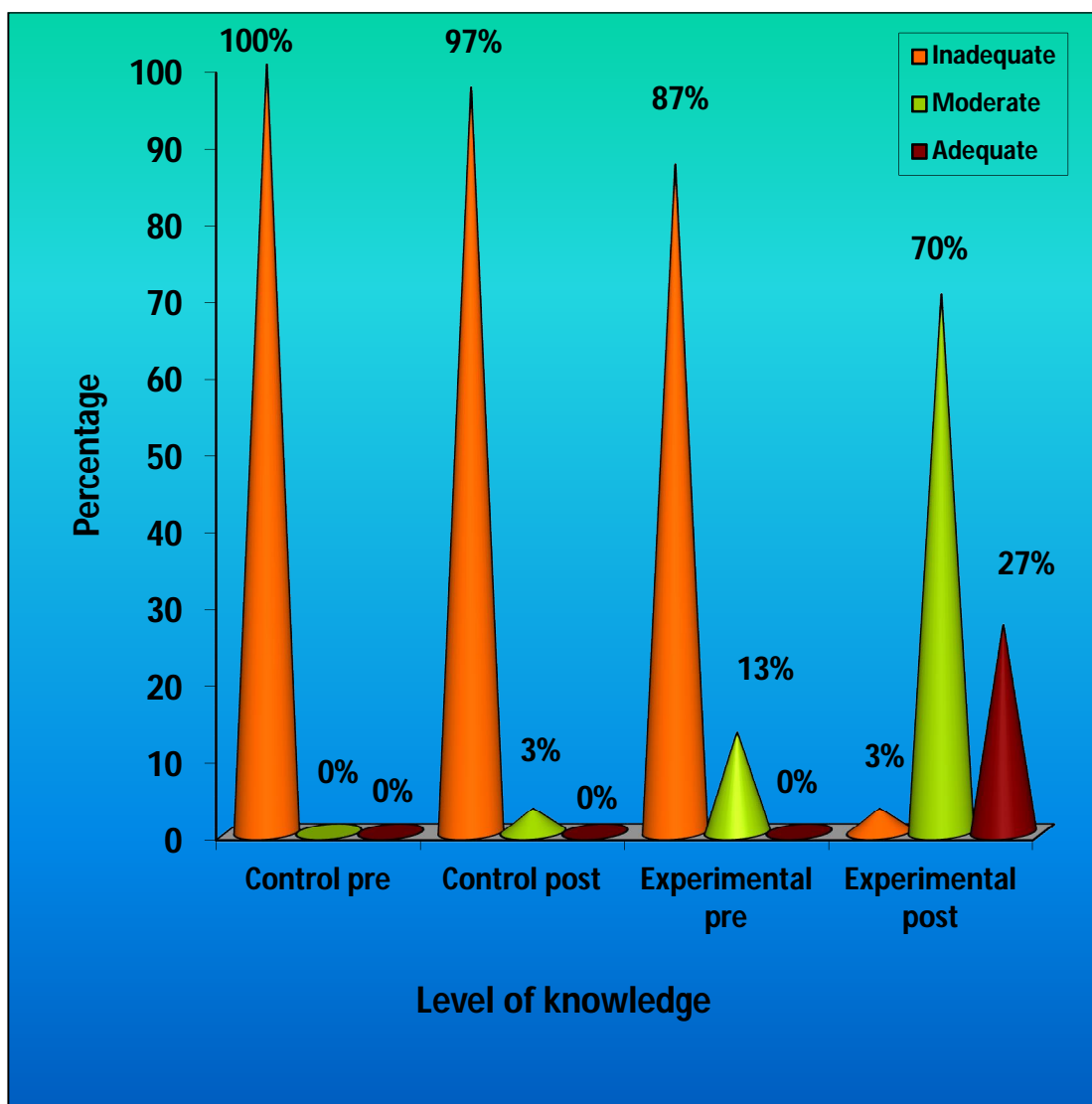
**TABLE 2.a**

Distribution of pre test and post test level knowledge among the mothers of under five children regarding the prevention of selected water borne diseases in experimental and control group n=60

Level of Knowledge	Experimental group				Control group			
	(30)				(30)			
	Pre test		Post test		Pre test		Post test	
	No	%	No	%	No	%	No	%
Adequate	-	-	8	27	-	-	-	-
Moderate	4	13	21	70	-	-	1	3
Inadequate	26	87	1	3	30	100	29	97

Table 2.a shows that the level of knowledge on prevention of selected water borne diseases before video assisted teaching programme in both experimental and control group were 26(87%), 30 (100%) inadequate and moderate level was 4(13%), 1 (3%) After the video assisted teaching programme the level of knowledge has considerably increased to inadequate level, 3% moderate level 70% and adequate level 27%. Since there was no intervention of video assisted teaching programme in the control , post test result was 1(3%) in moderate level.

**FIGURE -4**



**Distribution of mothers of under five children pretest and posttest knowledge in the experimental and control group**

**TABLE 2.b**

Distribution of level of practice among the mothers of under five children regarding the prevention of selected water borne diseases in experimental and control group

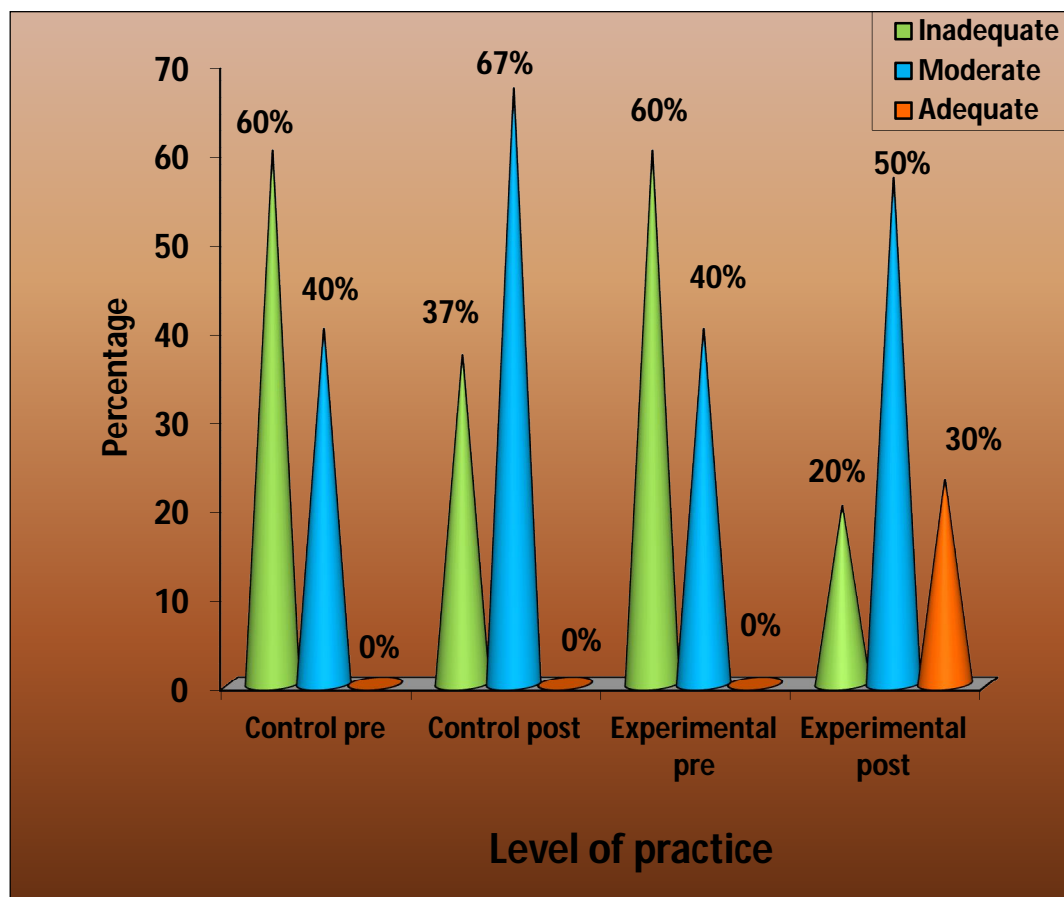
n=60

Level of Practice	Experimental group				Control group			
	(30)				(30)			
	Pre test		Post test		Pre test		Post test	
	No	%	No	%	No	%	No	%
Adequate	-	-	9	30	-	-	-	-
Moderate	12	40	15	50	12	40	19	63
Inadequate	18	60	6	20	18	60	11	37

Table 2.b shows that the level of practice on prevention of selected water borne diseases before video assisted teaching programme in both experimental and control group were generally 18(60%) , 18(60%) , and moderate level 12(40%),12(40%) After the video assisted teaching programme the level of practice has considerably adequate level 9(30%) moderate level 15(50%), 6(20%) in adequate level. Since there was no intervention of video assisted teaching programme in the control, post test result.



**FIGURE-5**



**Distribution of mothers of under five children in pretest and posttest practice in the experimental and control group**

**TABLE 3.a**

**SECTION III: EFFECTIVENESS OF VIDEO ASSISTED TEACHING PROGRAMME ON KNOWLEDGE AND PRACTICE OF MOTHERS OF UNDER FIVE CHILDREN REGARDING THE PREVENTION OF SELECTED WATER BORNE DISEASES.**

Comparison between pre test and pos test knowledge score in the control and experimental group. n=60

Level of Knowledge	Pre test		Post test		
	Mean	SD	Mean	SD	“ t” Value
Experimental group	23.97	11.7	66.87	7.92	18.24
Control group	17.07	3.76	20.3	7.07	3.36

“p” value 0.002\*\*

Table 3.a shows the pre test mean and post test mean, “t” value, which was calculated to determine the statistical significance of the difference.

There is a significant difference in knowledge regarding the prevention of selected water borne diseases among the mothers of under five children between pre test and post test mean score values in the experimental group. The video assisted teaching programme was found to be very effective. There was no significance difference in knowledge regarding the prevention of selected water borne diseases among the mothers of under five children between pre test and post test mean score values in the control group.

**TABLE 3.b**

Comparison between pre test and pos test practice level in the control and experimental group.

n=60

Practice	Pre test		Post test		“ t” Value
	Mean	SD	Mean	SD	
Experimental group	5.3	1.58	8.2	2.79	5.49
Control group	5.17	1.68	5.6	1.49	2.44

“p” value 0.021\*

Table 3.b shows the pre test mean and post test mean, “t” value, which was calculated to determine the statistical significance of the difference.

There was a significant difference in practice regarding the prevention of selected water borne diseases among the mothers of under five children between pre test and post test mean score values in the experimental group. The video assisted teaching programme was found to be very effective .There was no significance difference in practice regarding the prevention of selected water borne diseases among the mothers of under five children between pre test and post test mean score values in the control group.

**TABLE 4.a**

**SECTION –IV : RELATIONSHIP BETWEEN POST TEST KNOWLEDGE  
AND PRACTICE LEVEL OF MOTHERS OF UNDER FIVE CHILDREN  
REGARDING THE PREVENTION OF SELECTED WATER BORNE  
DISEASES IN THE EXPERIMENTAL GROUP**

Relationship between post test knowledge and practice level of mothers of under five children regarding the prevention of selected water borne diseases in the experimental group.

n=60			
Variable	Mean	SD	“r” value
Knowledge	66.87	7.92	0.65
Practice	8.2	2.79	

P < 0.05 significant

Correlation r value was computed between the variables indicated in table 4.a. It was observed that a moderate correlation between knowledge and practice which indicated a positive relationship as the values ‘r’=0.646 significant at 0.05 level. Therefore its interpreted that there is a significant relationship between knowledge and practice regarding the prevention of selected water borne diseases.

**SECTION –V: ASSOCIATION BETWEEN POST TEST KNOWLEDGE AND PRACTICE WITH SELECTED DEMOGRAPHIC VARIABLES REGARDING THE PREVENTION OF SELECTED WATER BORNE DISEASES.**

**TABLE 5.a**

**ASSOCIATION BETWEEN DEMOGRAPHIC VARIABLES POST TEST KNOWLEDGE AMONG MOTHERS OF UNDERFIVE CHILDREN.**

n=60

S.no	Demographic Variables	Inadequate	Moderate	Adequate	$\chi^2$
<b>1. Educational status :</b>					
	Illiterate	3	20	3	
	Primary school	0	30	0	
	Middle school	0	13	20	15.89*
	High school	0	7	0	
	Above High school	0	0	3	
<b>2. Is there any history of:</b>					
	Diarrhea	3	57	10	
	Typhoid	0	0	0	
	Hepatitis	0	0	0	0.62#
	Cholera	0	0	0	
	Diarrhea & typhoid	0	7	7	

# Not significant \* significant

The table 5.a reveals that the obtained chi-square value 15.89 showed that there was a significant association between educational status of the mothers of under five children and their knowledge level on selected water borne diseases.

**TABLE 5.b**

**ASSOCIATION BETWEEN DEMOGRAPHIC VARIABLES POST TEST  
PRACTICE AMONG THE MOTHERS OF UNDERFIVE CHILDREN.**

n=60

S.no	Demographic Variables	Inadequate	Moderate	Adequate	$\chi^2$
<b>1. Educational status :</b>					
	Illiterate	10	13	3	
	Primary school	7	13	10	
	Middle school	3	17	13	7.32#
	High school	0	7	0	
	Above High school	0	0	3	
<b>2. Source of water:</b>					
	Tap	3	3	0	
	Hand pump	0	0	0	
	Well	0	0	0	
	Tap & hand pump	7	10	7	
	Tap & well	0	3	0	6.79#
	Hand pump & well	3	0	7	
	Tap, hand pump & well	7	33	17	
	Pool	0	0	0	
	River	0	0	0	

# Not significant \* significant

The table 5.b reveals that obtained chi-square value 7.32 and 6.79 showed that there was no significant association between education status and source of water for among the mothers of under five children and their practice of water borne diseases.

**TABLE 5.c**

S.no	Demographic Variables	Inadequate	Moderate	Adequate	$\chi^2$
<b>3.</b>	<b>Is there any history of</b>				
	Diarrhea	21	36	29	
	Typhoid	0	0	0	
	Hepatitis	0	0	0	1.07#
	Cholera	0	0	0	
	Diarrhea& typhoid	7	7	0	

The table 5.c reveals that obtained chi-square value 1.07 showed that there was no significant association between previous history for among the mothers of under five children and their practice of water borne diseases.

## CHAPTER V

### DISCUSSION

This chapter deals with the discussion and interpretation of the findings to assess the effectiveness of video assisted teaching programme on the prevention of selected water borne diseases

The discussion was based on the objectives specified in this study.

**The first objective of this study was to assess the knowledge and practice regarding prevention of selected water borne diseases among the mothers of under five children.**

The findings shows that in the experimental group among 30 subjects 26(87%), inadequate and 4 (13%) moderate level during pre test, after the video assisted teaching programme 8 (27%) adequate, 21 (70%) moderate, 1(3%) inadequate of knowledge has considerably increased. In control group 30 subjects (100%) inadequate level in during pre test. Since there was no intervention of video assisted teaching programme in the control, post test result was 1(3%) in moderate level.

In the experimental group among 30 subjects 18(60%) inadequate, 12(40%) moderate practice in during pre test. After the video assisted teaching programme 9(30%) adequate, 15(50%) moderate, 6(20%) inadequate practice level. In control group 30 subjects 18(60%) inadequate, 12(40%) moderate practice in during pre test. Since there was no intervention of video assisted teaching programme in the control, post test result was 19(63%) in moderate, 11(37%) inadequate practice level.

This study was supported by the study conducted by Mwambete KD, JOSEPH, (2010) on knowledge and perception of mothers of under five childhood



diarrhea in Temeke. In this study it was found that the mother's knowledge was poor, which as directly correlated with educational level. only 31% had knowledge.

Similar type of quasi experimental study was conducted by McLannan JD (2000), a study on mothers of under five children regarding knowledge and practice of diarrhea. The result show that 28% knowledge and poor practice in not boiling the drinking water 55%, handwashing is not done 38%, before meals, 87% not wearing the chapels while going outside.

**The second objective was to evaluate the effectiveness of video assisted teaching programme knowledge and practice of mothers of under five children regarding the prevention of selected water borne diseases.**

In the experimental group "t" value 18.24 showed that there is 0.001 statistical significant differences between pre test and post test knowledge level. In the control group there was no statistical difference in the knowledge level among the mothers of under five children. Who were not exposed to video assisted teaching programme in the experimental group "t" value 5.49 showed that there is a 0.001 statistically difference between the pre test and post test practice level. In the control group there was no significant difference in the practice level among the mothers under five children who were not exposed to video assisted programme.

The study was supported by Ms.Kavitha.MDharapuram (2009) conducted study on knowledge and practice regarding prevention of water borne diseases among 200 school children , after structure teaching programme 136(68%) had adequate knowledge in post test. 144(72%) had adequate practice in post test

**The third objective was to correlate the relationship between post test knowledge and practice regarding the prevention of selected water borne diseases.**

The post test knowledge Mean value is 64.76 SD is 9.32. The post test practice value is 7.9 and SD is 2.6. Shows there was a moderate positive correlation ( $r=0.65$ ) and marked relationship between knowledge and practice of mothers of under five children regarding the prevention of selected water borne diseases.

The current study was coin sidewith conducted by Srilatha(2009) studyon knowledge of mothers of under five children regarding water borne disease. There was a positive co relation ( $r=0.19$ ) between mean post level knowledge scores of mothers of under five children regarding prevention of water borne diseases.

**The fourth objective was to determine the association between post test knowledge and practice with selected demographic variables.**

There was no significant association between post test knowledge and practice with selected demographic variables source of drinking water and previous history.

There was significant association between post test knowledge with educational qualification.

The study was coin side with supported by Ms.Kavitha.MDharapuram (2009),a study on knowledge and practice regarding the water borne diseases among the school children. Chi square values are calculated to find with association between practices of school children with selected demographic variables. There were no significant associations between type of family, type of water facilities for drinking (1.11), type of latrine facilities are less than the table value.

## **CHAPTER-VI**

### **SUMMARY AND RECOMMENDATIONS**

This chapter deals with the summary and conclusion drawn. It focuses on the implications and gives recommendations for Nursing practices, Nursing research, Nursing administration, and nursing education.

#### **SUMMARY OF THE STUDY**

The focus of the study to evaluate the effectiveness of video assisted teaching program on knowledge and practice of prevention of selected water borne diseases among the mothers of under five children in selected areas at Dindigul.

The objectives for the study were,

1. To assess the existing level of knowledge and practice regarding prevention of selected water borne diseases among the mothers of under five children in the experimental and control group.
2. To evaluate the effectiveness of video assisted teaching programme on knowledge and practice regarding prevention of selected water borne diseases among the mothers of under five children in the experimental and control group.
3. To find out the relationship between post test knowledge and practice regarding prevention of selected water borne diseases among the mothers of under five children in the experimental and control group.
4. 4.To find out the association between Post test level of knowledge and practice with selected demographic variables in the experimental and control group.

A review of literature helped the investigator to develop the conceptual frame work, questionnaire, checklist and methodology. The review was done with the help of various literatures. The conceptual frame work adopted for this study was derived from Von Bertalanffy's general system theory of learning (1968).

Research design adopted for the study was quasi experimental design. A questionnaire was developed and used for collecting data about knowledge and practice of prevention of selected water borne diseases among the mothers of under five children. The tool was found to be reliable and feasible. The reliability of the tool was established by test-retest method. The tool was administered among 6 mothers of under five children at K.Pudur. After a gap of one week, a retest was given. Karl parsons' coefficient of correlation was computed and reliability of the knowledge found to be 0.97% and the reliability for practice found to be 0.99%. The tool was found to be reliable. Data gathered were analyzed and interpreted terms of the study objectives.

The main study was conducted in selected areas at Dindigul for a period of 6 weeks. Convenience sampling technique was used to collect data from the study participants. Data were organized, analyzed, and interpreted by using both descriptive and inferential statistics.

## **MAIN FINDINGS OF THE STUDY**

Regarding level of knowledge and practice scores in the pre test among mothers of under five children, In the experimental group among 30 subjects 26(87%), inadequate and 4 (13%) moderate level during pre test. In control group 30 subjects (100%) inadequate level in during pre test.

In the experimental group among 30 subjects 18(60%) inadequate, 12(40%) moderate practice in during pre test. In control group 30 subjects 18(60%) inadequate, 12(40%) moderate practice in during pre test.

This may be due to non availability of mass media at home, poor literacy rate among female sex workers. Also the findings indicate that neither had they very limited exposure of education meetings nor they had exposure to the education methods which were not easily understandable or not touched the heart and minds of the mothers of under five children.

Regarding effectiveness of video teaching program, mean score of post test knowledge was higher than the pretest knowledge. It was 23.97 in pretest and 6.87 post test. The mean score practice in post test (5.3) increased from pretest mean score (8.2). This shows that there was significant difference between pre test and post test knowledge and practice regarding prevention of selected water borne diseases among the mothers of under five children. This shows that the video assisted teaching programme was effective. It was observed that the video assisted teaching programme plays a vital role in improving the knowledge and practice of mothers of under five children.

Regarding the relationship between post test knowledge and practice, there was a positive (moderate) correlation between the post test knowledge and practice.

Regarding association between level of knowledge and practice with selected demographic variables, there was no significant association between level of level of practice in source of water, previous history. There was a significant association between level of knowledge in educational status of the mothers of under five children.

The investigator feels that the video assisted teaching programme were more suitable for all mothers of under five children. As the content of the video assisted teaching programme emphasize of more importance of health and well being of the under five children's at least for the welfare of their offspring. The program is more appropriate to the mothers of under five children.

Regarding association between levels of practice with selected demographic variables, there were significant associations between their levels of practice of prevention of selected water borne diseases with income.

The investigator feels that education plays a vital role in bringing changes in the practice of the mothers of under five children. The education helps them for easy for understanding, analyzing and internalizing the information.

## **CONCLUSION**

The main conclusion of this present study is that education plays fundamental role in bringing changes in health and well being of the children's. It was learnt that education materials must be developed in such a manner that it should touch the hearts and minds of the people rather than just giving raw information. Prior discussion must be held with mothers of under five children to understand their experiences, problems, needs and expectations for developing a right, informative, educative, effective, and efficient and a unique material. The investigator hopes that the video assisted teaching program could increase the knowledge and practice regarding prevention of selected water borne diseases among the mothers of under five children.

## **IMPLICATIONS**

The findings of the study have several implications in following field. It can be discussed on four areas namely nursing practice, Nursing administration, Nursing education and Nursing research.

### **IMPLICATIONS FOR NURSING PRACTICE**

1. The study findings will help the Community Health Nurses and Village Health Nurses to create awareness to the mothers of under five children regarding prevention of selected water borne diseases by intensifying group health and individual health education programs with effective audio- visual aids
2. The findings emphasize the need for preventive education regarding prevention of selected water borne diseases through public health personnel to increase the knowledge and practice about water borne diseases.
3. The community health Nurses can Plan, Implement and evaluate various teaching programmes regarding the prevention of selected water borne diseases among the mothers of under five children.
4. The Nurse Can co –ordinates with other health team members and conduct awareness programme to mothers of under five children community.

### **NURSING ADMINISTRATION**

1. This study will encourage the community health Nurse administrator to arrange for conference and seminars related to prevention of selected water borne diseases of among mothers of under five children.

2. The present study helps the nursing administrative authority to recognize the need for developing appropriate education program on prevention of selected water borne diseases.
3. The administration should allocate budgets for developing educational materials like pamphlets, posters, slides, cassettes, models, flexes, etc. which contain information on prevention of selected water borne diseases.
4. Nursing administration should provide necessary facilities to conduct public private partnership programme on prevention of selected water borne diseases with nearby primary health center.

#### **NURSING EDUCATION**

1. The study emphasizes the need for educating the nursing personnel through in-service or continuing education program to update their knowledge regarding prevention of selected water borne diseases.
2. The nursing education should prepare the nurses to practice as 'Nurse Counselor', 'Nurse Communicator' and 'Nurse Consultant' to identify the selected water borne diseases.
3. Nursing student must improve their capacity for identifying selected water borne diseases.

#### **IMPLICATIONS OF NURSING RESEARCH**

1. The study motivates the other investigator to conduct further studies regarding the prevention of selected water borne diseases among the mothers of under five children.



2. This study will bring about the fact that more studies have to be done in the mothers of under five children community.
3. This study can be a baseline for the future studies to build upon.
4. Extensive research can be conducted to create awareness to the community regarding the prevention of selected water borne diseases among the mothers of under five children.

### **LIMITATIONS**

1. The study was conducted only at selected areas.
2. The limitation of the study included the relatively smaller sample size, hence generalization may not possible.

### **RECOMMENDATIONS**

1. A similar study can be undertaken by utilizing other domain like attitude.
2. A similar study can be undertaken with large number of samples which might lead to generalization.
3. A similar study can be conducted as a comparative study between rural and urban areas of mothers of under five children.
4. The similar study can be conducted in another setting.
5. The video teaching program can be administered among community based organization and people associated with other nongovernmental organizations.
6. The video teaching program can be shown in private and government hospitals where services related to prevention of selected water borne diseases.

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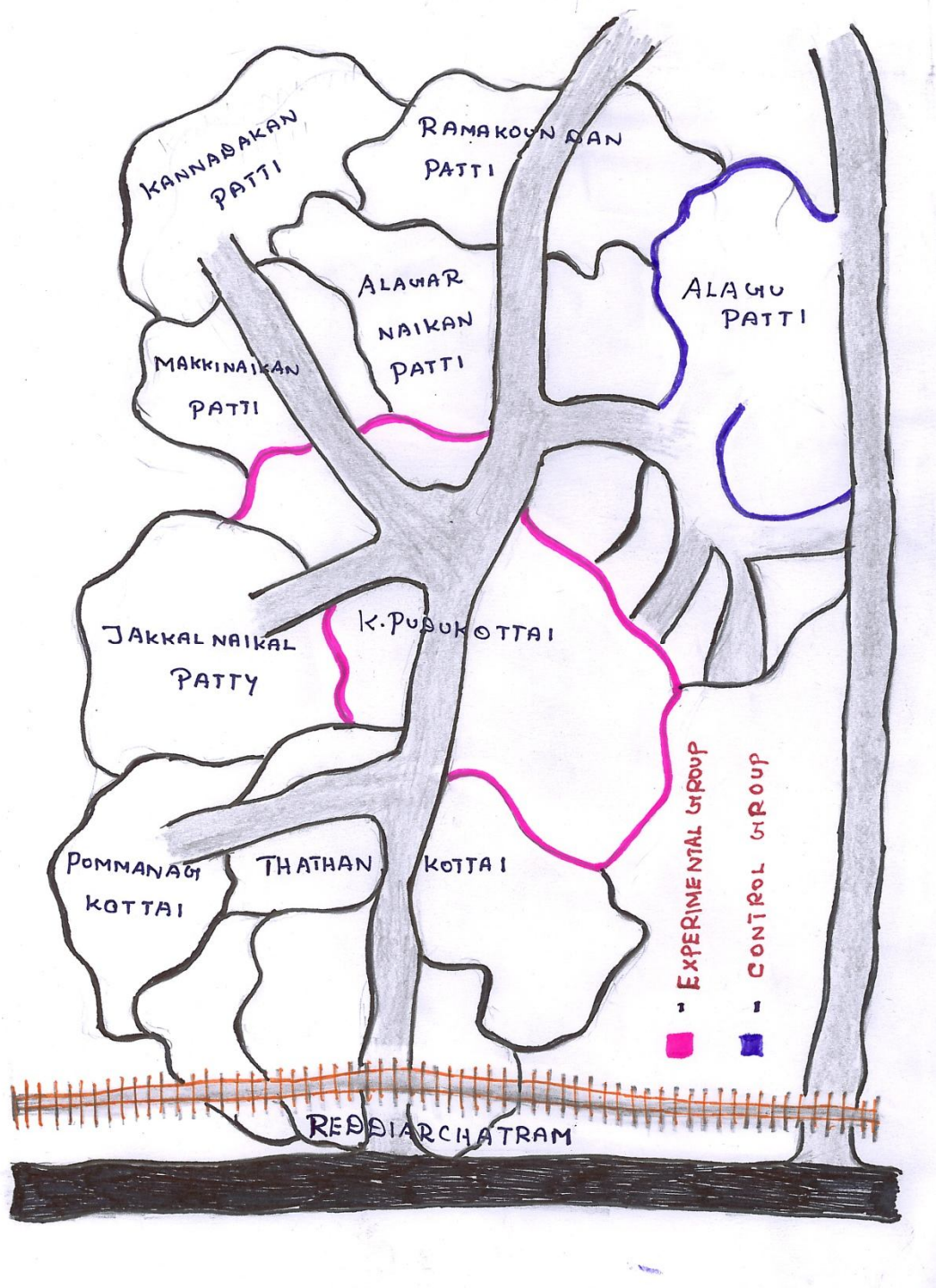
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## APPENDIX-I

Area map



## APPENDIX II

### LETTER REQUESTING PERMISSION FOR CONDUCTING THE STUDY



#### SAKTHI COLLEGE OF NURSING

(Approved by)

Recognized by IHC, TNC & Affiliated to Dr. M.G.R. Medical University)

Sakthi College of Nursing,  
Palakkanathu,  
Dindigul - 624 624

Phone : 0451 - 2050272  
Hotline : 97509 56810  
Fax : 0451 - 2554317  
email : sakthinursingcollege@gmail.com

**Dr. K.Vembanan, M.B.B.S., M.S.,**  
Chairman

#### PERMISSION LETTER

From

The Principal,  
Sakthi College of Nursing,  
Oddanchatram, Dindigul (Dt)

To

**THE MEDICAL OFFICER .**  
**PRIMARY HEALTH CENTRE, [MOVT],**  
**K. PUDUKKOTTAI .**

Respected Sir / Madam,

Sub.: Request for permission to conduct research study - reg.

MRS. MAHESWARI .K is a bonafide M.Sc., Nursing student studying of our college. As a partial fulfillment of The Tamilnadu Dr. MGR Medical University requirement for the award of the M.Sc., Nursing Degree, she is undertaking (A research study on "PREVENTION OF SELECTED WATER BORNE DISEASES AMONG MOTHERS OF UNDER FIVE CHILDREN'S"), she has identified your villages as the best place to conduct the study.

Further details of the proposed project will be furnished by the student personally. She will not hinder your routine in any way and she will abide to the rules and regulations of the institution. All the information collected from institution will be kept confidential.

I kindly request you to grant her permission to conduct the study at your esteemed institution.


Thanking you,

Yours sincerely,

Date :

Place :

  
16/1/13  
மருத்துவ அலுவலர்  
அரசு ஆரம்ப சுகாதார நிலையம்,  
க.புதுக்கோட்டை,  
திண்டுக்கல் மாவட்டம்.

  
**Principal**  
Sakthi College of Nursing  
Sakthi Nagar, Palakkanathu  
Dindigul - (Dist)  
624 624

### APPENDIX III

#### LETTER REQUESTING EXPERTS OPINION AND SUGGESTION FOR THE CONTENT VALIDITY OF TOOL

From

K, MAHESWARI  
MSc NURSING II<sup>ND</sup> YEAR  
SAKTHI COLLEGE OF NURSING  
ODDENCHATTIRAM.

To

Respected Sir,

Sub:-Requisition from expert opinion and content validity reg.

I K.MAHESWARI am 2<sup>nd</sup> year MSc Nursing student Sakthi College of Nursing Oddenchattram, Dindigul under Tamilnadu Dr.MGR Medical University.

As a partial fulfillment of M.Sc Nursing Degree program, I am conducting a research study “**A Quasi experimental study to evaluate the effectiveness of video assisted programme on knowledge and practice regarding prevention of selected water borne diseases among mothers of under five children’s in selected areas of Reddiar chattiram block at Dindigul district**”. for the study I have developed a questionnaire to assess the knowledge and observation check list to assess the practice among mothers of under five children’s.

I am sending the research tool for content validity and request you to give your expert and valuable review and opinion. I will be very thankful if your return at the earliest. Here with I have enclosed the necessary documents.

Thanking you.

**Enclosed**

Yours sincerely.

- Statement of the problem and objectives of the study.
- Tool with blueprint and scoring key
- Brief note on the research methodology and intervention tool
- Certificated of content validity



## **CERTIFICATE OF CONTENT VALIDITY**

### **TO WHOM SO EVER IT MAY CONCERN**

This is to certify that the tool prepared by **K.MAHESWARI II nd year M.Sc Nursing** student of Sakthi College of Nursing for the conduction of the “**A QUASI EXPERIMENTAL STUDY TO EVALUATE THE EFFECTIVENESS OF VIDEO ASSISTED TEACHING PROGRAMME ON KNOWLEDGE AND PRACTICE REGARDING PREVENTION OF SELECTED WATER BORNE DISEASES AMONG THE MOTHERS OF UNDER FIVE CHILDREN’S IN SELECTED AREAS AT DINDIGUL ”** is valid .She can proceed in conducting the data collection with it.

SIGNATURE

Place:

Date:

## **APPENDIX- IV**

### **EXPERT LIST**

**Mrs.V.Janahi Devi,Msc(N)**

Principal

Sakthi college of Nursing

Oddanchatram.

**Mrs.Julitet Sylvia, Msc (N), PhD**

Professor

Sacred heart Nursing College.

Madurai

**Mr.John Sam Arun Prabhu, Msc (N), PhD**

HOD of Community Health Nursing

CSI Jeyaraj Annapackiam College of Nursing

Madurai-4

**Mrs.Sheeba, Msc (N)**

Dept of Community Health Nursing

Ambilikai.

**Mrs A.Muthulakshmi.Msc (N)**

Principal

Annai Dora College of Nursing

Andipatti.

**Dr.Navaneetha ,PhD**

Assistant Professor

Pondicherry Institute of Medical Science

Pondicherry-44

**Dr.K.Swaminathan**

Biostatistician

Senior Manager, South India AIDS Action Programme,  
Chennai.

**Mr.Mani Velusamy**

Bio-Statistician

Salem.

## **APPENDIX- V**

### **CERTIFICATE FOR ENGLISH EDITING TO WHOME SO EVER IT MAY CONCERN**

This is to certify that the dissertation fitted “ Effectiveness of video assisted teaching Programme on knowledge and practice regarding the prevention of selected water borne diseases among the mothers of under five children in Dindigul “by K.MAHESWARI, II Year M.sc. (N) sakthi college of Nursing was edited for English Language appropriateness by Mrs.Maheswari, Department of English, Sakthi Arts and Science College , Oddanchatram .,

  
Signature

## APPENDIX- VI

### CERTIFICATE FOR TAMIL EDITING TO WHOME SO EVER IT MAY CONCERN

This is certify that the tools demographic variables.Structured knowledge questionnaire ,observation check list “ to evaluate the Effectiveness of video assisted teaching Programme on knowledge and practice regarding the prevention of selected water borne diseases among the mothers of under five children in Dindigul “by K.MAHESWARI, II Year M.sc. (N) sakthi college of Nursing was edited for her dissertation fitted “**Effectiveness of video assisted teaching Programme on knowledge and practice regarding the prevention of selected water borne diseases among the mothers of under five children.** Was edited for Tamil Language appropriateness by Mrs.Jansirani, Tamil department at Sakthi Arts and Science College, Oddanchatram.

  
Signature

**APPENDIX- VII**

**RESEARCH PARTICIPANTS CONSENT FORM**

Dear parents,

I am a M.sc, Nursing student of college of Nursing, Dindigul. As a part of my study, a research on Effectiveness of video assisted teaching programme regarding the knowledge and practice of prevention of selected water borne diseases among the mothers of underfive children is selected to be conducted. The findings of the study will be helpful in improving knowledge and practice of selected waterborne diseases among the mothers of underfive children.

I here by seek your consent and cooperation to participate in the study please frank and honest in your responses. The information collected will be kept confidential and anonymity will be maintained.

Signature of the Researcher

I ....., here by consent to participate and undergo the study.

Signature of the participant.

## – Āiöî°ĀĀ Āí Ĩ Ĩ ĀÚĀ¼ü, ĲÉ ´òð¼ø ĀÊĀõ

« ýĀi÷ó¼ ¼iöĀi÷, §Ç.

Ĳiý °ì ¼Ĳ Ĩ°ĀĲĀĲ÷, øæĲĀĲø Ĩ°ĀĲĀĲ÷ ĀĀü°ĀĲø ÓĐ, Ĳ Ā Āð¼õ  
ĨĀÚĀ¼ü Ĩ ĀĀü°ĀĲý ´Õ ĀĨ ¼ĀĲ, ³óĐ ĀĀĐĨ Ĩ ðĀð¼ Ĩ Ĳó Ĳ, Û Ĩ Ĩ  
ĀĀ Ĩ ÊĀ ĲĲĲĲø ĀĀĀ Ĩ ÊĀ §Ĳiö, ù ĀüÜõ ¼Ĳ òð Ó Ĳ Ĳ, ù ĀüÊĀ¼ĲÉ  
« ÊĲ Ĩ Û÷ Ĳ ĀüÜõ ĀĀü°Ĳ, Ĳ Çò ĀüÊĲ ¼iöĀi÷, ÇĲ¼õ, Ĳ ĲÊĲø.

þĲÉiø þó¼ – Āiöî°ĀĀ ĲĲ, ù Āí Ĩ Ĩ ĀÊ – Ĳ, Û Ĳ ĲĀ ´òð¼ø  
ĀüÜõ ´òĐ ĲĲ Āõ §Āñ Ĩ, §Ëý. ¼Ā× Ĩ°öĐ – Ĳ, Û Ĳ ĲĀ Ā¼ø, ù  
ĨĀÇĲĀ ĲĀĲ, ×õ, Ĳñ ĲĲ ĀĀĲ, ×õ þÕĲ, §Āñ Ĩ õ. – Ĳ, Û Ĳ ĲĀ Ĩ Êöð, ù  
þĀ, °ĀĀĲ, ĲĲ ĀĲ, ôĀĲ õ ĀüÜõ – Ĳ, Û Ĳ ĲĀ Ĩ ĀĀ÷ §ĀÚ ±Ĳ Ĩ õ  
ĨĀÇĀ¼òĀð Āið¼Đ.

– Āiö°ĀĲÇiý Ĳ, ĨĀîĀõ.

----- ±ýÊ Ĳiý þó¼ – Āiö°ĀĀ Āí Ĩ Ĩ ĀÊ ´òð¼ø « ÇĲ, §Ëý.

Āí Ĩ ĨĀÚĀĲĲiý Ĳ, ĨĀîĀõ.

## **APPENDIX-VIII**

### **PART I**

#### **BASELINE PERFORMA**

**INSTRUCTION:** Place a tick mark on the answer which is the respondent find as more appropriate.

**Sample No:**

**1) Age in years:**

- a) Below 20 years
- b) 20 to 30 years
- c) 30 to 40 years

**2) Educational status of the mother:**

- a) Illiterate
- b) Primary school
- c) Middle school
- d) High school
- e) Above high school

**3) No of children:**

- a) 1
- b) 2
- c) 3

**4) Type of family:**

- a) Nuclear
- b) Joint
- c) Extended family



**5) Family income:**

- a) < 1000
- b) 1001>3000
- c) 3001>5000
- d) >5000

**6) Mass media at home:**

- a) Radio
- b) TV
- C) News paper
- d) Others

**7) Source of water**

- a) Tap
- b) Hand pump
- c) Well
- d) Pool
- e) River

**8) Surrounding the drinking water**

- a) Drainage
- b) Dustbin
- c) Open defecation

**9) Is there is any history of**

- A) Diarrhea
- b) Typhoid
- C) Hepatitis A
- d) Cholera

## **PART II**

### **QUESTIONNAIRE TO ASSESS THE KNOWLEDGE OF MOTHERS OF UNDER FIVE CHILDREN RELATED TO PREVENTION OF SELECTED WATER BORNE DISEASES**

#### **INSTRUCTION:**

- **PLACE A (✓) TICK MARK ON THE ANSWER WHICH IS THE RESPONDED FIND AS MORE APPROPRIATE.**
- **FOR CERTAIN QUESTIONS MORE THEN ONE RESPONSE MAY BE FOUND APPROPRIATE**
- **THEN EVERY CORRECT ANSWER CARRIES ONE SCORE**

**1) What are all the basic needs of human beings?**

- |          |               |
|----------|---------------|
| a) Air   | c) Earth      |
| b) Water | d) Don't know |

**2) What are the functions of water?**

- a) It provide moisture in the body
- b) It helps in Absorption, digestion , metabolism of food
- c) It helps in Regulation of body temperature
- d) It promotes Blood circulation
- e) Don't know

**3) How much percentage of water present in our body?**

- |               |        |
|---------------|--------|
| a) 40 %       | c) 30% |
| b) 60%        | d) 20  |
| e) Don't know |        |

**4) How much amount of water is needed per day in human beings?**

- a) 1 Liter
- b) 2 Liter
- c) 3 Liter
- d) Don't know

**5) What are all the ways the Water is contaminated?**

- a) Improper water Storage
- b) Mixing with agricultural pollutants
- c) Mixing with industrial waste
- d) Mixing with sewage water
- e) Don't know

**6) What do you mean by safe water?**

- a) Free from pathogenic agents
- b) Free from harmful chemical substances
- c) Don't know

**7) What are the causes of water borne diseases?**

- a) Poor personal hygiene
- b) Poor environmental hygiene
- c) Poor food hygiene
- d) Don't know

**8) Can you please name some of the water borne diseases that occur in under five children?**

- a) Diarrhea
- b) Typhoid
- c) Cholera
- d) Hepatitis A
- e) Don't know

**9) What are all ways water borne diseases occur in human beings?**

- a) Using contaminated water for food preparation
- b) Using contaminated water for personal hygiene
- c) Using contaminated water for recreation action
- d) Don't know

**10) How to prevent the water contamination**

- a ) Chlorination of water
- b) Safe disposal of faeces
- c) proper disposal waste
- d) Don't know

**11) Which are the Method used to disinfect the water in home?**

- a) Boiling
- b) Chlorine
- C) Domestic filters
- d) Don't know

**12) What do you mean by diarrhea?**

- a) Passage of liquid or watery stools more than 3 times / day
- b) It's caused by virus
- c) Don't know

**13) What are all the causes for diarrhea?**

- a) Drinking contaminated water
- b) Taking contaminated food
- c) Soil pollution
- d) Lack of hygienic practices
- e) Don't know

**14) What are all the symptoms of diarrhea?**

- a) Loose stools
- b) Abdominal cramps
- c) Weakness
- d) Abdominal distention
- e) Don't know

**15) What are all the management of diarrhea?**

- a) ORS preparation
- b) More fluid intake
- c) Less fibre diet
- d) Avoid beverages
- e) Don't know

**16) What are all the complication of diarrhea?**

- a) Severe dehydration
- b) Malnutrition
- c) Don't know

**17) What are the preventive measures for diarrhea?**

- a) Drinking safe water
- b) Hand washing with soap before & after defecation
- c) Covering food
- d) Using chapels
- e) Don't know

**18) What do you mean by typhoid fever?**

- a) Continuous fever present in 3 to 4 weeks
- b) It's caused by bacteria
- c) Don't know

**19) What are the causes of typhoid fever?**

- a) Poor standard of drinking water
- b) Improper hand washing after defecation
- c) Don't know

**20) What are the symptoms of typhoid fever?**

- a) Abdominal pain
- b) vomiting
- c) Diarrhoea
- d) Don't know

**21) What are all the management of typhoid fever?**

- a) Tepid sponge
- b) Oral hygiene
- c) Adequate Fluid intake
- d) Bland diet
- e) Antibiotic
- f) Rest
- g) Don't know

**22) What are all the complication of typhoid fever?**

- a) Bronchitis
- b) Intestinal perforation
- c) Don't know

**23) What is the preventive measure for typhoid fever?**

- a) Chlorination of public water supply
- b) flies control
- c) Disposal of excreta
- d) Don't know

**24) What do you mean by hepatitis- A ?**

- a) Inflammation of the liver
- b) It's caused by virus
- c) Don't know

**25) What are all the causes of hepatitis –A?**

- a) Faecal contamination of water
- b) Environmental pollution
- c) Don't know

**26) What are the symptoms of hepatitis- A?**

- a) Yellowish skin and eyes
- b) Dark urine
- c) Anorexia
- d) Diarrhea
- e) Don't know

**27) What are the management of hepatitis- A?**

- a) Diet
- b) Bed rest
- c) Don't know

**28) What are all the complications of hepatitis- A?**

- a) Dehydration
- b) Hepatocellular carcinoma
- c) Don't know

**29) What are all the preventive measures for hepatitis- A?**

- a) Personal cleanliness
- b) Avoid using contamination of food & water
- c) Safe disposal of excreta
- d) Don't know

**30) What is cholera?**

- a) Acute diarrheal diseases
- b) It's caused by bacteria
- c) Don't know

**31) What are all the causes of cholera?**

- a) Poor personal hygiene
- b) Poor environmental hygiene
- c) Disposal of excreta
- d) Don't know

**32) What are all the symptoms of cholera?**

- a) Decreased skin turgor
- b) Decrease urine output
- c) Decreased pulse rate
- d) Don't know

**33) What are all the management of cholera?**

- a) Fluid intake
- b) Food hygiene
- c) Good nutrition
- d) Don't know

**34) What is the complication of cholera?**

- a) Acute Renal failure
- b) Pulmonary edema
- c) Don't know

**35) What are the preventive measures for cholera?**

- a) Boiled drinking water
- b) use of sanitary latrine
- c) Food hygiene
- d) Don't know



### **PART III**

#### **OBSERVATION CHECK LIST FOR ASSESS THE PRACTICE OF MOTHERS OF UNDER FIVE CHILDREN RELATED TO PREVENTION OF SELECTED WATER BORNE DISEASES**

<b>Sl.No</b>	<b>QUESTIONS</b>	<b>YES</b>	<b>NO</b>
1	Drinking only boiled water		
2	Taking bath daily		
3	Washing hands before cooking		
4	Storing the water in clean and covered vessels		
5	Washing the vegetables and fruits before cooking		
6	Washing the hands with soap and water after defecation		
7	Taking water from closed well		
8	Using boiled feeding materials		
9	Using sanitary latrine for defecation		
10	Practicing good personal hygiene		
11	Wearing chapels while leaving the house		
12	Cutting the nails regularly		
13	Maintaining environmental Hygiene		
14	Covering the food vessels		
15	Maintaining kitchen garden		

## APPENDIX IX

$$^{-}\tilde{A}_{\frac{1}{2}}\tilde{A}_{\frac{1}{2}}\tilde{O}$$

$$\tilde{A}\tilde{I}\frac{3}{4}\tilde{C}-1$$

$$\S_{\div}i\frac{1}{2}\tilde{O}\tilde{i}_{\frac{1}{2}}\acute{E}\grave{A}\acute{E}\tilde{A}\tilde{o}$$

$$\grave{I}\grave{E}\tilde{o}\tilde{O}:\acute{y}\grave{E}\acute{y}\grave{A}\acute{y}\acute{y}\grave{E}i_{\frac{1}{2}}\grave{i}\S_{\frac{1}{2}}\grave{u}\tilde{A}\tilde{C}_{\frac{1}{2}}\grave{y}\grave{C}\tilde{A}_i{}^o\tilde{o}\tilde{D},\tilde{A}\tilde{i}_{\frac{1}{2}}\grave{u}\frac{3}{4}\tilde{O}\tilde{o}\tilde{A}\frac{3}{4}\tilde{O}\tilde{i}\grave{I}$$

$$(\checkmark)\grave{I}\grave{E}\tilde{A}\tilde{C}\frac{1}{4}\times\tilde{o}$$

$$\ll\grave{E}\tilde{o}\tilde{A}\tilde{y}\frac{1}{4}\tilde{o}\frac{3}{4}\tilde{A}\tilde{o}_{\frac{1}{2}}\grave{u}$$

$$\tilde{A}_i\frac{3}{4}\tilde{C}_i\tilde{C}\pm\tilde{n}:$$

$$1.\tilde{A}\tilde{A}\tilde{D}:$$

$$2.\tilde{A}\tilde{E}\tilde{o}\tilde{O}:\begin{array}{l}1.\tilde{A}\tilde{E}\tilde{i}_{\frac{1}{2}}\frac{3}{4}\tilde{A}\div\\2.\neg\tilde{A}\tilde{o}\tilde{A}\tilde{i}_{\frac{1}{2}}\tilde{o}\tilde{A}\tilde{C}\\3.\neg\tilde{A}\div\tilde{C}\tilde{y}\tilde{A}\tilde{i}_{\frac{1}{2}}\tilde{o}\tilde{A}\tilde{C}\\4.\frac{1}{2}\tilde{o}\tilde{a}\tilde{e}_i\tilde{o}\tilde{A}\tilde{E}\tilde{o}\tilde{O}\\5.p\frac{3}{4}\tilde{A}\end{array}$$

$$3.\grave{I}\tilde{I}\tilde{o}\tilde{A}\tilde{o}\frac{3}{4}\tilde{O}\neg\grave{u}\grave{C}:\begin{array}{l}1.\acute{y}\acute{U}\\2.p\tilde{A}\tilde{n}\tilde{I}\\3.\tilde{a}\acute{y}\acute{U}\end{array}$$

$$4.\grave{I}\tilde{I}\tilde{o}\tilde{A}\tilde{A}\tilde{y}_{\frac{1}{2}}:\begin{array}{l}1.\frac{3}{4}\acute{E}\tilde{q}\grave{I}\tilde{I}\tilde{o}\tilde{A}\tilde{o}\\2.\grave{U}\tilde{O}\tilde{I}\grave{I}\tilde{I}\tilde{o}\tilde{A}\tilde{o}\end{array}$$

$$5.\tilde{A}_i\frac{3}{4}\tilde{A}\tilde{O}\tilde{A}_i\acute{E}\tilde{o}:\begin{array}{l}1.\tilde{a}.10000\grave{I}\tilde{I}\tilde{o}\tilde{I}\tilde{y}\grave{E}\times\\2.\tilde{a}.1001-\tilde{a}.3000\\3.\tilde{a}.3001-\tilde{a}.5000\end{array}$$

$$4.\tilde{a}.5000\grave{I}\tilde{I}\tilde{o}\S\tilde{A}\tilde{o}$$

$$6.\tilde{A}\tilde{D}\tilde{E}\tilde{o}\neg\grave{u}\grave{C}\mid\frac{3}{4}_i\tilde{y}\tilde{A}\mid\frac{3}{4}_i\frac{1}{4}\div\tilde{O}:\begin{array}{l}1.\S\tilde{A}\tilde{E}\S\tilde{A}_i\\2.\mid\frac{3}{4}_i\tilde{y}\tilde{A}\tilde{i}_{\frac{1}{2}}\tilde{o}{}^o\mid\tilde{A}\tilde{o}\tilde{E}\\3.\div_i\grave{C}\frac{1}{4}\acute{u}_{\frac{1}{2}}\grave{u}\\4.p\frac{3}{4}\tilde{A}\end{array}$$



## ÀÌ ¾¢-2

³òÐ ÁÁ¼ÙÌ ðÀð¼ Ì Æó´¼ ÇŸ ¾ìöÁì÷ ÇŸ ¿Æìø ÁÁÁÌ ÛÊÂ §¿ìö´ Çò  
ÀüÊŒ «Ê×ò¼Ê´ É ÿ ñ ¼ÊÖð §¿÷Ó÷ò §¾÷×ì ÿì ÁÊÁ´ Áì òÀð¼  
ÁÆì ÿù.

!ÀìÐÁìÉ §ùÁ¢ù

1.ÁÉ¼ÙÌ Ì §¾´ ÁÁìÉ «ÊðÁ´ ¼ð §¾´ Áù ±ŸÉ?

1. ÿüÙ 2.¿Äð 3.¿Ê 4. |¾ìÃìÐ

2.¿Ÿ ÁÁŸù Áì´ Á?

- 1.´ ¼Öì Ì ®ÁðÁ¼ð´ ¾ì | ÿì Ì ÿÊÐ.
2. | ò¼ø, ÁÇ÷´´ ¾ ÁìüÊð¼ÙÌ ´ ¾× ÿÊÐ.
- 3.´ ¼ÄŸ | ÁðÀ ¿´ Ä´ Áî òÁì Ì ÿÊÐ.
- 4.þÁð¼ ´ ð¼ð´ ¾ òÁì Ì ÿÊÐ.
5. |¾ìÃìÐ

3.¿ÁÐ ÁÉ¼ ´ ¼Äð ±ùÁÇ× ò¼Áð¿ ¿Ê òðÊî ´ ùÇÐ?.

- 1.40 ò¼Áð¿
- 2.30 ò¼Áð¿
- 3.60 ò¼Áð¿
- 4.20 ò¼Áð¿
5. |¾ìÃìÐ

4.´Ö ¿ì´ ÇÌ Ì ÁÉ¼ÙÌ Ì §¾´ ÁÁî ò ¿Ÿ «Ç× ±ùÁÇ×?

- 1.1Äð¼÷
- 2.2Äð¼÷
- 3.3Äð¼÷
4. |¾ìÃìÐ

5.±ùÁÆÇÇ ¿Ê ÁìíÁî ŸËÉ?

- 1.í ÿ¾ìÁÁÜÊ Á´ Áð ¿Ê Áî §°Áðð´ Áð¼ø
- 2.¿Êð ÁÁ°ìÁì Æ×ù ÆðÁ¼ìø
- 3.¿Êð |¾ìÆÜ°´ Áì Æ×ù ÆðÁ¼ìø
- 4.¿Êð òì´ ¼ ¿Ê ÆðÁ¼ìø

6.  $\mathbb{A}_1 \otimes \mathbb{A}_1 \cong \mathbb{A}_1 \oplus \mathbb{A}_1$  ?

1.  $\text{O} \hat{\text{A}} \text{t} \text{u} \ll \text{u} \hat{\text{E}} \text{t} \hat{\text{A}}$
2.  $\frac{3}{4} \text{f} \text{ l} \hat{\text{A}} \text{t} \text{u} \hat{\text{A}} \text{t} \text{ l} \text{ o} \text{ s} \hat{\text{A}} \frac{3}{4} \text{t} \text{ l} \hat{\text{A}} \text{ i} \text{ O} \hat{\text{d}} \text{u} \text{ p} \hat{\text{o}} \hat{\text{A}} \text{ i} \text{ D} \text{ p} \text{O} \hat{\text{o}} \frac{3}{4} \hat{\text{o}}$ .
3.  $\text{ l} \frac{3}{4} \text{ i} \hat{\text{A}} \text{ i} \text{ D}$

¿fÉiø ÅÃÀì ÜÊÂ §¿iö,û

7. ¿Qué es  $\mathbb{A}^1_{\mathbb{C}} \setminus \{0\}$  como  $\mathbb{C}^*$ ?

1.  $\frac{3}{4}y \text{ } \bar{\text{I}} \text{ } \frac{3}{4}\bar{\text{A}}\bar{\text{y}} \text{ } \bar{\text{A}}$
2.  $\bar{\text{I}} \text{ } \bar{\text{U}}\bar{\text{U}}\bar{\text{I}} \text{ } \bar{\text{Y}} \text{ } \bar{\text{A}}\bar{\text{e}} \text{ } \bar{\text{A}}\bar{\text{i}} \text{ } \bar{\text{I}} \text{ } \bar{\text{A}}\bar{\text{i}}\bar{\text{I}}$
3.  $\bar{\text{I}} \text{ } \frac{3}{4}\bar{\text{A}}\bar{\text{e}}\bar{\text{A}}\bar{\text{i}} \text{ } \frac{3}{4} \text{ } \frac{1}{2} \times$
4.  $\bar{\text{I}} \text{ } \frac{3}{4}\bar{\text{A}}\bar{\text{i}}\bar{\text{D}}$

8. 306 ÅÅ¾ü - ðÀð¼ l Åó·¾, é ìl ¿Æjø ÅÅÅì ÜÊÀ §¿ö, ü ±ý|ÉýÉ ±ýÚ |°jøÄ ÓÊÔAj?

1. ÅÄöÜô ŞÀì Ì
2. ¨ ¼Ä ö Î
3. Å ò ó¼ţ ŞÀ¼ţ
4. | ¾; Ć Æ

9. ¿Qué es el **UÊÂ** **Ş**? ¿**ö** **û** **±** **ù** **Ä** **Ä** **ö** **Á** **É** **%** **Ö** **ì** **-** **Ö** **Ä** **;** **È** **?**

1.  $A_i \vdash \Delta \text{O} \frac{1}{4} \text{E} \text{O} \circ \cdot \Delta \text{O} \frac{3}{4} - \frac{1}{2} \Delta \text{E} \text{I} \text{O}$
2.  $A_i \vdash \Delta \text{O} \frac{1}{4} \text{E} \text{O} - \frac{1}{4} \cdot \Delta \text{I} \text{O} \frac{3}{4} \text{O} \mid \circ \text{O} \frac{3}{4} \text{O}$
3.  $A_i \vdash \Delta \text{O} \frac{1}{4} \text{E} \text{I} \cdot \Delta \Delta \text{E} \text{I} \text{I} \text{O} \text{O} - \Delta \Delta \text{I} \text{O} \frac{3}{4} \text{O}$
4.  $\mid \frac{3}{4} \text{I} \Delta \text{I} \text{D}$

10. ¿E Á; Í À Â ¾ · Ä ± ù Å; Ú ¾ Î ì , Ä; ã?

1.  $\mathbb{Z}_p \not\cong \mathbb{Z}_q$  -  $\mathbb{A}_p \mathbb{A}_q$  -  $\mathbb{Z}_p \mathbb{Z}_q$
2.  $\mathbb{A}_p \mathbb{Z}_p \cong \mathbb{A}_q \mathbb{Z}_q$   $\iff \mathbb{A}_p \mathbb{Z}_p \cong \mathbb{A}_q \mathbb{Z}_q$   $\iff \mathbb{Z}_p \cong \mathbb{Z}_q$   $\iff \mathbb{Z}_p \cong \mathbb{Z}_q$
3.  $\mathbb{A}_p \mathbb{Z}_p \cong \mathbb{A}_q \mathbb{Z}_q$   $\iff \mathbb{A}_p \mathbb{Z}_p \cong \mathbb{A}_q \mathbb{Z}_q$   $\iff \mathbb{Z}_p \cong \mathbb{Z}_q$   $\iff \mathbb{Z}_p \cong \mathbb{Z}_q$
4.  $\mathbb{Z}_p \mathbb{Z}_q \cong \mathbb{Z}_p \mathbb{Z}_q$

11.±ó | ¾ó¾ Ó · È Ç Ä Å Æ Ø ¿ · Æ Î Í ò¾òÀî ò¾Ä;õ?

- [illegible]

12. ÅÄÛÚô §À;ì Ì ±ýÈ;ø ±ýÉ?

1.  $\text{ÓýÚ} \frac{3}{4} \text{Å} \text{Ì} \text{Ş} \text{Á} \text{ø} \frac{1}{2} \text{Ě} \text{Ş} \text{À} \text{ý} \text{Ú} \text{Á} \text{Ä} \text{ö} \text{Æ} \text{ò} \frac{3}{4} \text{ø}$
2.  $\text{Å} \text{Å} \text{Š} \text{Ö} \text{Ä} \text{Ä} \text{Ě} \text{ø} \text{z} \text{Ü} \text{Ä} \text{Ä} \text{Đ}$
3.  $\frac{3}{4} \text{Ä} \text{Ä} \text{Đ}$

13.±ó|¾ó¾ ÅÆÇÇ|ÄøÄjõ ÅÄüÜô \$À;ì ì ºüÃ Å¾üì ¸jÃ½í ¸ü Å;· Å?

1. Áĭ Ĭ Àð¼ ¿Ê Âî ĩ Êð¾ø  
2.« Ø₃ ¢̂ - ½ × ô | Äj Õð₅ `` Ç - ñ ÀÐ  
3. Í üÜòÈõ Äĭ|Äĭ Î ¾ø  
4. Í ò¾ÁŸ `` Å  
5. | ¾; ¤Ā Ð

**14. ÅÄÛÚÔ ŞÀ;ì ,ü,jÉ «Èè Èç,û Â;¨ Å?**

1.  $\frac{3}{4}\pi - \frac{1}{2}E$
2.  $\frac{\sqrt{3}}{2}(\sin\theta + \cos\theta) = \frac{1}{2}$
3.  $S^0_j \div x$
4.  $\frac{\sqrt{3}}{2}(\sin\theta + \cos\theta)$
5.  $\frac{3}{4}\pi \pm \frac{\pi}{2}$

**15.ẢẤƯÚÔ \$À;ì ,ý \$À;Đ °Á;Çà Ì õ Ó·È ,û Â; ·Ả?**

1. -ôð-°÷ì ¸ Æ ¸ Æ°ø¼Ã¡¡ò¼ø
- 2.«¼¢«û×¿ÊÌÊð¼ø
- 3.¿¡÷î °ðÐÌ ¸ üö¼ -½×Å ¸ ¸ Ç±Î ð¼ø
- 4.ÌÇÊÃ¡É Å ¸ ¸ Ç¼Å¿ð¼ø
- 5.|¼¡Ã¡Ð

16. ÅÄÛÚô ŞÀ;ì ,É;ø ²üÀÎ ã ÀÏÄÇ· Ç× ,û Â;· Å?

1. ÅÈñ ¼ °ÕÃõ
2. ° ð¼î °ðÐ ÀÜËì ì ¨ È
3. | ¾| Ç Æ

17. ÅÄÛÚô ŞÀ;ì ¨ ±ùÅ;|ÈøÄ;õ¾Î ì ÓÊÔõ?

1. ĀiĐ, ôĀiÉ Ĵf· Āi ĩ Êð¼ø
2. ĀĀö, Ēð¼ Āý °×i ĵiĀö ĩ ĵiñ ĩ ĩ ĵiĵiø ĵi Ĵ ĩð¼ö ĩ °ö¼ø
3. ĩ ½×ô ĩ ĀiÖð ĵi Ĵ ã Ē ĵi Āð¼ø
4. ĵiĀ ĩ½ĵi ĵi Ĵô ĀĀýĀi òð¼ø
5. ĩ ĵiĀ ĀiĐ

18. ¼Ä;öŦ ½öŦ°ø ±ýÈ;ø ±ýÉ?

1. ā ý Ú « ø Æ Ð ¿ ý ſ Ä; Æ ð ¼ ü ſ ½öŦ°ø þ Õ ð ¼ ø
2. Ä; ï È; Ä; ¼ Õ Ä Ä É; ø ² ü Ä Ŧ Ä Ð
3. ½; ü Ú § ¿ ö
4. ½; Ä; Ð

19. ¼Ä;öŦ ½öŦ°ø ² ü Ä Ŧ Ä ¼ ü ſ Ä ½ ſ ü Ä; ² Ä?

1. Í ð ¼ Ä ü È ¼ ñ ½ ð Ä Ä; Ä; ø ð
2. Ä Ä ø ¼ Ä ð ¼ Ä ý ² ¼; ø ² ¼ Í ð ¼ ø ſ ø Ä; Ð þ Õ ð ¼ ø
3. ½; Ä; Ð

20. ¼Ä;öŦ ½öŦ°Öì ½É « È ð È ¿ ü Ä; ² Ä?

1. Ä Ä ü Ú Ä Ä ¿
2. Ä; ó ¼ ¿
3. Ä Ä ü Ú ø § Ä; ï ſ
4. ½; Ä; Ð

21. ¼Ä;öŦ ½öŦ°ø Ä ó ¼; ø Ä ý Ä ü È ſ Ü Ê Ä Ä Õ ð Ð Ä Ó ² È; ü ± ² Ä?

1. ſ ¼ ¿ ¿ ¿ ø ² ð ¼ ¼ ø
2. Ä ø Í ð ¼ ø
3. § ¼ ² Ä Ä; É « ¼ × ¼ ñ ½ ð ſ È ð ¼ ø
4. °; ¿ Ä ¿ ¼ ² ½ × ² ð ſ ü Ü ¼ ø
5. § ¿ ö ± ¼ ¿ ø ð Ä; ð ¼ ¿ Ä ² ð ſ ü Ü ¼ ø
- ? 7 ø È ſ
7. ½; Ä; Ð

22. ¼Ä;öŦ ½öŦ°Ä;ø ² ü Ä Ŧ ø Ä ý Ä ¿ ¼ × ü Ä; ² Ä?

1. ā î Í ſ ú ø § ¿ ö
2. ſ ¼ ø Ð ² ¼ ² ü Ä Ŧ ¼ ø
3. ½; Ä; Ð

23. ¼Ä;öŦ ½öŦ° ² Ä ± ü Ä; | È ø Ä; ø ¼ Ŧ ſ Ó Ê Õ ø?

1. ſ § ¿ ý Í ð ¼ ¿; ¿ ¼ ø Ä ð ¼ ſ È ¿
2. Í ð ¼ Ä; É ¼ Ä ² È ² ¼ Ä ý Ä Ŧ ð Ð ¼ ø
3. ² ½ Ä ¿ ® ſ Ä; ø ð Ä ² ¼ ¼ Ä ¿ ð ¼ ø
4. Ä Ä ð ² ¼ Ä; Ð ¼ ø Ä; É Ó ² È Ä ¿ « ¼ ü Ü ¼ ø
5. ½; Ä; Ð

24. | † 0À'' ¼ðÊŠ ±ýÈ;ø ±ýÉ?

1. ¸ ÖÁ¸ Ç;ø ¸ øÄÄø Ä;¾ÖÀ'' ¼¾ø
2. '' ÄÄŠ ¸ ÖÁÄÊ;ø ²üÄÎ ÄÐ
3. | ¾;Ä;Ð

25. | † 0À'' ¼ðÊŠ ÄÖÄ¾ü;É ¸;Ä½í ¸ ü Ä;'' Ä?

1. ÄÄö ¾ñ ½½ø ¸ Äð¾ø
2. Í üÚÎ ÝÆø Ä;Í ÄÎ ¾ø
3. | ¾;Ä;Ð

26. | † 0À'' ¼ðÊ...ý «Èð È¸ ü Ä;'' Ä?

1. ÄÎ °ü çÈ §¾;ø ÄüÜö ¸ ñ
2. °Üç¸ çÈö Ä;Ü¾ø
3. Ä°Äý '' Ä
4. ÄÄüÜö §Ä;ì ì
5. | ¾;Ä;Ð

27. | † 0À'' ¼ðÊ...ý ÄÖðÐÄ Ó'' È ¸ ü Ä;'' Ä?

1. ¸ ½ ×
- ; 7 ø È Ì
3. | ¾;Ä;Ð

28. | † 0À'' ¼ðÊ...Ê;ø ²üÄÎ ö ÄýÄ¸ Ç× ¸ ü Ä;'' Ä?

1. ÄÈñ ¼ °ÖÄö
2. ¸ øÄÄø ðüÜ§ç;ö
3. | ¾;Ä;Ð

29. | † 0À'' ¼ðÊ'' ... ±üÄ;| ÈøÄ;ö ¾Î ì ¸ ÓÊÖö?

1. ¾ý Í ð¾ö
2. à ö'' ÄÄ;É ç¸ Äì Ì Èð¾ø
3. | ¾;Ä;Ð

30. Ä;ö¾§Ä¾±ýÈ;ø ±ýÉ?

1. ÄÄüÜö §Ä;ì ì §ç;ö
2. Ä;ì È;Ä; ¸ ÖÁÄÊ;ø ²üÄÎ ÄÐ
3. | ¾;Ä;Ð





¿ÏÇÉjø ÅÅÀi ÙÊÀ \$¿jð... Ç ¾Î ï ï ð ÅÅÙøÇÓ... È... Ù ï... É ÀðÊÀø

Àjç... ±ñ	ÅÅÙøÇÓ... È... ù	¬ð	þø... Ä
1	...¾Ç... Åð¾¾ñ ½Ê... Ài   Èð¾ø		
2	¾ÇÈÓð   Çð¾ø		
3	°... ÀðÅ¾ü   Öý ... Ç... Ø×¾ø		
4	ð¾ÅjÈ ÖEA Åjð¾Åð¾ø... Åð¾ø		
5	°... ÀðÅ¾ü   Öý... ð... È... ù ÅùÙð ÅÊí... Ç... Ø×¾ø		
6	ÅÅð... Åð¾Åý... Ç \$°jðÅjð... Ø×¾ø		
7	ã ÊÀ... ½üÊÀÖðð¾ñ ½Ê... ±   ð¾ø		
8	...¾Ç... Åð¾ ¿Ïø... ØÅÅ Åjð ð... ðÈ... Ç ÅÅýÅ   ð¾×ð		
9	ð¾ÅjÈ... ÅÇ... È... Ç ÅÅýÅ   ðð¾ø		
10	ð¾ÅjÈ ÅÊí... ÅÊí... Ç ÅÊí... ¾ø		
11	ÅðÈü   ÅÇ\$Å   °øÖð \$Åjð... Å½ç... Ç ÅÅýÅ   ðð¾ø		
12	¾j¼÷ðð ¿...ð¾  ð¾ø   °ø¾ø		
13	üÙððÈ Ýü¿... Å... Å Åjð... ð¾ø		
14	...½×ð Åjð¾Åí... ù ã È... Åð¾ø		
15	Åð   ð \$¾jð¾ð... ¾ð ÅÅjÅjðð   °ø¾ø		

## APPENDIX X

### KEY NOTE

### PART II

Serial No	Correct Response	Score
1	a,b,c	3
2	a,b,c,d	4
3	b	1
4	b	1
5	a,b,c,d	4
6	a,b	2
7	a,b,c	3
8	a,b,c,d	4
9	a,b,c	3
10	a,b,c,	3
11	a,b,c,	3
12	a,b	2
13	a,b,c,d	4
14	a,b,c,d	4
15	a,b,c,d	4
16	a,b	2
17	a,b,c,d	4
18	a,b	2
19	a,b	2
20	a,b,c,d	4
21	a,b,c,d,e,f	6
22	a,b	2
23	a,b,c	3
24	a,b	2
25	a,b	2
26	a,b,c,d	4
27	a,b,	3
28	a,b	2
29	a,b,c	3
30	a,b	2
31	a,b,c	3
32	a,b,c	3
33	a,b,c	3
34	a,b	2
35	a,b,c	3

**TOTAL SCORE=100**

**PRACTICE**

**KEY NOTE**

**PART III**

<b>Serial No</b>	<b>Response</b>		<b>Score</b>	
1	yes	No	1	0
2	yes	No	1	0
3	yes	No	1	0
4	yes	No	1	0
5	yes	No	1	0
6	yes	No	1	0
7	yes	No	1	0
8	yes	No	1	0
9	yes	No	1	0
10	yes	No	1	0
11	yes	No	1	0
12	yes	No	1	0
13	yes	No	1	0
14	yes	No	1	0
15	yes	No	1	0

**Total Score = 15**

## **APPENDIX XI**

### **CONTENT OF THE VIDEO ASSISTED TEACHING PROGRAM ENGLISH AND TAMIL**

**PREPARED BY**

**K.MAHESWARI**

## **INTRODUCTION**

Water is the most indispensable nature resources in the world for every living being. The entire life support systems are dependent upon this vital resource. The quality of drinking water is powerful environmental determinant of health. Assurance of drinking water safety is a foundation for the prevention and control of water borne diseases.

Children health is important for the growth of the country and global development. Water is needed for every human being mainly children, Children are affected by water borne diseases mainly due to contamination of water .

In this world child health protection is important. Regarding prevention of water borne disease is the improving the children health. The mothers should give importance of gaining knowledge and practice prevention of selected water borne diseases.



<p>Enumerate the Contamination of water</p>	<ul style="list-style-type: none"> <li>○ Absorption, digestion , metabolism of food.</li> <li>○ Regulation of body temperature</li> <li>○ Blood circulation</li> </ul> <p><b>Contamination of water</b></p> <ul style="list-style-type: none"> <li>○ Mixing factory waster in to water sources.</li> <li>○ Fecal natters mixed in to water sources</li> <li>○ Putting dirty hands or unclean vessels tot aks drinking water</li> <li>○ Storing the water in open tank.</li> <li>○ Mixing of drainage water in to water sources</li> <li>○ Storing the water in the unclean vessels.</li> <li>○ Defecate near to water sources.</li> </ul>
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<p>How to prevent the water contamination</p>	<p><b>Prevention of water Contamination</b></p> <ul style="list-style-type: none"> <li>○ Chlorination of water</li> <li>○ Safe disposal of faeces</li> <li>○ proper disposal waste</li> </ul>
<p>What do you mean by safe water?</p>	<p><b>Safe and wholesome water.</b></p> <p>Water intended for human consumption should be both safe and wholesome. water is</p> <p><b>defined as</b></p> <ul style="list-style-type: none"> <li>● Free from pathogenic agents.</li> <li>● Free from harmful chemical substances.</li> <li>● Pleasant to the taste ,i.e free from color and odour.</li> <li>● Useable for domestic purposes.</li> </ul>





State the types	<p><b>Types:</b></p> <ul style="list-style-type: none"><li>▪ Acute (short term .lasting less then 2 weeks)</li><li>▪ Chronic (Long term lasting longer then 2 weeks)</li></ul> <p><b>Signs and symptoms</b></p> <ul style="list-style-type: none"><li>▪ Diarrhea,</li><li>▪ cramping,</li><li>▪ Vomiting,</li><li>▪ Abdominal pain,</li><li>▪ nausea,</li><li>▪ Fever</li><li>▪ abdominal distension</li></ul>
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<p>List down the Signs and symptoms</p>	<p><b>Treatment.</b></p> <ul style="list-style-type: none"> <li>▪ Treatment usually involves replacing lost fluids.</li> <li>▪ Oral rehydration therapy in case of mild diarrhea.</li> <li>▪ Intravenous fluid therapy in case of severe diarrhea.</li> <li>▪ Bacterial infections Administered antibiotics.</li> </ul>
<p>Explain the management</p>	<p><b>Management:</b></p> <ul style="list-style-type: none"> <li>• Isolate the child to prevent the spread of infection</li> <li>• The excreta should be properly disinfected and disposed.</li> <li>• A child with diarrhea can have regular fluids or special fluids for diarrhea</li> <li>• Monitor vital signs, skin changes &amp; behavior changes regularly.</li> <li>• Monitor the nutritional status of the child.</li> </ul>

List out the complication	<p><b>Complication</b></p> <ul style="list-style-type: none"> <li>• Severe dehydration</li> <li>• Malnutrition</li> <li>• Abdominal distension</li> <li>• Kidney failure</li> <li>• Circulatory failure</li> </ul>
Define typhoid fever	<p><b>II TYPHOID FEVER</b></p> <p><b>Definition:</b></p> <p>It's acute bacterial infection characterized by constitutional symptom like prolonged pyrexia, prostration and involvement of spleen and lymph nodes It's caused by salmonella typhi..</p>
State the symptoms	<p><b>Signs and symptoms</b></p> <ul style="list-style-type: none"> <li>➤ Rapid raise of temperature</li> <li>➤ Extreme malaise</li> <li>➤ Anorexia</li> </ul>

<p>Explain the management</p>	<ul style="list-style-type: none"> <li>➤ Headache</li> <li>➤ Vomiting ,abdominal pain and distension</li> <li>➤ Low pulse rate</li> <li>➤ cleanliness of consciousearn</li> <li>➤ diarrhea</li> <li>➤ Abdomen – doughy feal</li> <li>➤ Raise back of the trunk</li> <li>➤ Convulsions ,Anaemia and blood lost</li> </ul> <p><b>Management</b></p> <ul style="list-style-type: none"> <li>➤ Child with the high fever should be given tepid sponge and provided with the adequate fluid intake.</li> <li>➤ Check, vital signs the body temperature, pulse, respiration and behavioral changes should be observed.</li> </ul>
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List down the  
complication

- Observe the circulatory collapse.
- fluid and electrolyte balance should be maintained.
- Diet should contain bland food with high calories and high proteins. The food should be easily digestible. The roughage gas providing food should be avoided. Diluted milk, glucose and well cooked cereals rice , soft cooked egg, bread and butter. Additional B complex and vitamin C helpful.
- General hygiene should be maintained including oral hygiene and care of hair.

**Complications**

- Respiratory problems,
- intestinal perforation



Define Hepatitis -A

## **HEPATITS-A**

### **Definition:**

It is the inflammation of the liver and can result in liver cell damage and destruction.

List down the Signs and symptoms

### **Signs and symptoms**

- ❖ Fever
- ❖ nausea
- ❖ vomiting
- ❖ decreased appetite ,
- ❖ not feeling well
- ❖ diarrhea
- ❖ joint pain.













<p>Explain the Management</p>	<p><b>Management</b></p> <ul style="list-style-type: none"> <li>❖ Supportive care ( healthy diet and rest)</li> <li>❖ Isolation</li> <li>❖ General hygiene</li> <li>❖ Medications ( to control itching)</li> <li>❖ Administer medication</li> <li>❖ Hospitalization</li> <li>❖ Liver transplantation</li> </ul>
<p>Mention the complication</p>	<p><b>Complications</b></p> <ul style="list-style-type: none"> <li>❖ Dehydration</li> <li>❖ Hypokalemia</li> <li>❖ Hepatitis</li> <li>❖ Hepatocellular carcinoma.</li> </ul>






Explain the Management	<ul style="list-style-type: none"> <li>➤ Vomiting</li> <li>➤ Dehydration.</li> </ul> <p><b>Management</b></p> <ul style="list-style-type: none"> <li>➤ Rehydration therapy</li> <li>➤ Sanitation measures such as water control, excrete disposal, food sanitation and disinfection.</li> <li>➤ Cholera vaccine.</li> </ul>
Mention the Complication	<p><b>Complications:</b></p> <ul style="list-style-type: none"> <li>➤ Acute renal failure,</li> <li>➤ Paralytic ileus ,</li> <li>➤ Pulmonary edema</li> <li>➤ Arrhythmia,</li> <li>➤ Hypokalemic nephropathy.</li> </ul>

List down the preventive measures for water diseases.

**Preventive measures for water borne diseases.**

-  Drinking safe water
-  Covered food vessels
-  Chapels wearing
-  Chlorination of water
-  Flies control
-  Well balanced diet
-  Medication
-  Rest
-  Excreta disposal
-  Hygiene
-  Immunization
-  Doctor check up

<p>Explain the Vaccination schedule</p>	<ul style="list-style-type: none"> <li> Isolation</li> <li> Waste disposal</li> <li> Filtration</li> </ul> <p><b>Vaccination schedule</b></p> <p><b>Diarrhea</b></p> <p>Administered Rotorix – Oral route, 2 and 4 Month (2 doses).</p> <p>Administered 1st dose – from the week to 12 weeks</p> <p>Administered 2<sup>nd</sup> dose – within 16 weeks.</p> <p><b>Typhoid</b></p> <p>Administered 2,5,8,12 years of age group</p> <p><b>Hepatitis –A</b></p> <p>Administered From the 6 months to 18 months</p>
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	<p><b>Cholera</b></p> <p>Administered Dukora -2 –5 years or Sanchol and morcvax –2 years</p> <p><b>CONCLUSION:</b></p> <p>Through this video assisted programme mothers of under five children protect their children from selected water borne diseases by understanding and practice the above said information.</p>
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¿É¡ø ÀÃÀì ÜÊÂ \$¿;ö,û ÁüÚõ ¾Î ôò Ó´È,û  
ÀüÈÂ ÅÇì,ôÀ¼õ



## ÓyŮ·Ă

ˆ ÂĉĭŖĭÇÁĭÉ ħÁĐ âÁĉ ħĭýŭ ħăýŮ Áĭĭ ħĭĖĭø  
ÝúóĐúÇĐ.ˆ Äŭ ħŭĭĂĭŮ ˆ ÂŮŮ ħĭˆ ÂŮŮŭĭŭˆ ÈŮŮ ņĭ÷óŖ¼  
þŮĭŭĖĐ.þýˆˆ ÈĀ ĭ Ėóˆˆ¼ŭ ħĭðĖý ĀŮĭŭÄ à ħŭŭ.ĭ Ėóˆˆ¼ŭÇý ˆ¼ø  
ħÄóˆˆ¼ó ĭĂĭŮðŖ¼ ˆŮ ħĭðĖý ĀÇ÷ĭŉ þŮĭŭĖĐ.ˆŮ ħĭðĖý ĀÇ÷ĭŉ Āĉŭ  
ÓĭŭĀĀĭÉ ħýŮ (ŖĀŭĭŉýÉ Áĭ¼ĭĭ ħŮŮ ĭ Ėóˆˆ¼ŮŮ ðĀĀĀø ĀĭúĀĭ¼ĭĀ  
ĀÇ÷ĭŉŉ ĭ Āĉŭ ÓĭŭĀĀĭÉĐ).

"ħĭŷÈĉ « ˆˆ ĀĀĭĐ ˆ Āĭ " ±ýĀĐ ħŮ Āŭé Āĭŷ  
ĀĭŮĭĀĭĖ.þó¼ĀĭĀŷ ħĖ ĀĀð 70% ˆ ŭÇĐ.ħĖ ħÁĐ ˆ ÂĉŭĀÉ¼Ůĭĭ Āĉŭ  
ÓĭŭĀ ĀĭŭŭÉ « ÇŉŭĖĐ.ˆ¼Āø 70% ħĖĭŉðĐ ˆ ŭÇĐ.ˆŮ ħĭˆ Çĭĭ  
ĀÉ¼Ůĭĭ Ŗ¼ˆ ĀðĀĭŮ ħĭŷ « Ç× 2 « øĀĐ 3 Äð¼÷.ĭ Ėóˆˆ¼ŭŮĭĭ  
ĀĭĭĀĭ¼ŭÈ ˆ¼× ĀŭŮŮ ħĖ ĭŭĭĭ ð¼ŖĀĤýŮ.

ĭ Ėóˆˆ¼ŭŮĭĭ « ÈðĀˆ¼ð Ŗ¼ˆ ĀŭÇĭÉ ˆ¼×, ˆˆ ÈĀ¼Ů, ħĖ,  
ø Èĭ ĀĭĐŭðð, ŉăŭð¼ŷ ˆðĐˆ Ėðð « ĀŉĀŮ.ˆŮ ĭŉĖĭĭ Ŗĭ¼ ¼ŖĖ  
ŉ ŭÈĖĖĭø « Đ ±ŭĀÇ× ĀĀýŭŭ Çð ŖŮŮĖŖ¼ĭ,« ĐŖĀĭĀ ĭð¼ĀĭÉ  
ĭ Èħĭŷ ħĀŮ ĭ Ėóˆˆ¼ŭŭ Ç ŖĭŮŭŭÇĀŮŮĐ ŖĀĖðĐ,« Ā÷ŭÇŷ  
±¼ĖŭĭÄð¼ŭĭ ĀĖĭŉŉ¼ĭĀ ĀĖ.

§, uÅ¢	¬ uÇ¼ĩ , õ
<p>¿¢ ±ýÀÐ ±ýÉ?</p>	<p>¿¢:-</p> <p>"¿¼ŸÈ« ¨ ÁÂĬÐ - ÄĬ " ±ýÀÐ ¿õ ÅûÛ ÄĬŸ ÄĬöĬ ÄĬÆĬ.þó¼ÄĬÄŸ ¿¢ ÄÃõð 70% ¬ ûÇÐ.¿¢ ¿ÄÐ - Ä¢,ÄÉ¼ÛĬĬ Ä¢ ÓĬ ,ÄÄĬ ,Ÿ É « ÇĬ ,ÈÐ.¬ ¼Äø 70% ¿¢ĬõðÐ ¬ ûÇÐ.´Õ ¿Ĭ¨ ÇĬĬ ÄÉ¼ÛĬĬ §¼¨ ÄðÄĬ õ ¿¼Ÿ « Ç× 3 Äø¼÷.Ĭ Æó¨ ¼, ÛĬĬ ÄĬĬ ÄĬ¼üÈ - ½× ÄüÜõ ¿¢ Ĭ ,ĬĬ ð¼SÄ ¿ýÜ.</p> <p><math>B \cdot \hat{A} \pm \hat{o}^2 \hat{a} \hat{A} B \cdot \sim \emptyset \subset \tilde{N} \pm \hat{o} \hat{A} \cdot "</math> <math>\hat{o} \pm \sim^2 \mid &lt; / \cdot &gt; \acute{o} \grave{i} 5 &gt; \pm \text{Ü} \hat{a} , \text{Ç} \hat{y} \text{õ} \text{Ð} , \text{Ä} \text{ø} \text{È} \grave{i} 5 \tilde{N} &lt;</math></p> <p>« Ä°Äõ.´Õ Ĭ°ÈĬĬ ¼ñ ½¢ ° üÈÉĬø « Ð ±ùÄÇ× ÄÄŸ ,¨ Çò ¼Õ,ÈS¼Ĭ,« ÐSÄĬÄĬ ð¼ÄĬÉĬ È¿¼Ÿ ā ÄõĬ Æó¨ ¼,¨ Ç S¿Ĭö,ÇÄÕóÐ ¼Ä¢òÐ,« Ä÷,ÇŸ ±¼¢,Ĭ Äð¼üĬ ÄÆĬ °ö¼Ĭ Ä¢.</p> <p>¿¼Ÿ ÄÄŸ ,û:-</p> <ul style="list-style-type: none"><li>➤ ¬ ¼ÖĬĬ ®ÄðÄ¼ð¨ ¼Ĭ Ĭ ,ĬĬĬ ÈÐ.</li><li>➤ Ĭ°Ĭð¼ø, ÄÇ÷°Ÿ ¼ ÄĬüÈð¼üĬ ¬ ¼× ÈÐ.</li><li>➤ ¬ ¼ÄŸ ĬÄðÄ ¿Ÿ Ä¨ ÄĬ °ÄĬĬĬ ÈÐ.</li><li>➤ þÄð¼ ´ð¼ð¨ ¼ °ÄĬĬĬ ÈÐ.</li></ul>

٢٤ ±ùÅ¡|ÈøÄ¡õ  
 Á¡ÍÀÎ ¿ÈÐ?

¿Ê ±ùÂ¡ | ÈøÄ¡õ Ä¡ÍÄÍ ¿ÏÈÉ?

- Í ¿¡¾¡ÄÄüÈ Ä´ ¿Äø ¿Ê´ ÄÍ §°ÁòÐ ´ Äò¾ø
- ¿Êø ÄÄ°¡Äì ¿Æ× ¿ü ¿ÄòÄ¾¡ø
- ¿Êø |¾¡Æü°¡´ Äì ¿Æ× ¿ü ¿ÄòÄ¾¡ø
- ¿Êø °¡ì ´ ¼ ¿Ê ¿ÄòÄ¾¡ø

Ä¡Ð ¿òÄ¡É ¿Ê ±ÿÄÐ:-

§¿¡ö ¿ÖÄ¿ü « üÈ,Í´ ÄÔ¾ÿ ÜÊÄ,- ¼Öì §¾´ ÄÄ¡É ¾¡Ð - ôò¿ü - üÇ Ì Ê¿Ê,ÄüÜö Ð÷¿¡üÈö þøÄ¡Ð þÖòÄÐö Ä¡Ð ¿òÄ¡É ¿Äì ö.

¿Ê Ä¡ÍÄÍ ¾´ Äò¾Î ì ö Ó´È¿ü:-

¿ÄÐ þøÄÍ ¿Çø Ì Ê¿Êø Ì §Ç¡¡ÿ - Ä§Ä¡¿Ä¾ÿ ã ÄÓö, ¿Ê´ Äì | ¿¡¾¿ ´ ÄòÄ¾¡Öö, ¿Ê´ Ä ÄÊ¿Ô Ä¾¡Öö,¿Ê Ä¡ÍÄÍ ¾´ Äò¾Î ì ÖÊÖö. §ÄÖö ¿¡ö Ä° ò ÄÊ ÄüÜö |¾Öì ¿Çø - üÇ ¿Æ× ¿Ê´ Ä « ¿üÜÄ¾¡Öö, Ì Ê¿Ê Ì Ê¡ö ¿Çø ¿Äì ¿Äø¾Î ôÄ¾ÿ ã Äö¾Î ì ÖÊÖö.

- ¿Ê ±ùÂ¡ | ÈøÄ¡õ Ä¡íÁî ¿ÏÈÉ?**
- í ¿¼¡ÄüÈ Å¨ ¿Äø ¿f' Âî §°ÁòÐ¨ ¨ Àð¾¡ø
  - ¿Äø Ä°¡Àì ¿Æ× ¿û ¿ÄôÀ¾¡ø
  - ¿Äø |¾¡Æü°¨ ¨ Äì ¿Æ× ¿û ¿ÄôÀ¾¡ø
  - ¿Äø °ì¨¨ ¼ ¿Ê ¿ÄôÀ¾¡ø
- Ä¡Ð ¿òÄ¡É ¿Ê ±ýÀÐ:-**
- §¿¡ö ¿ÖÄ¿û « üE, í¨ ÂÔ½ý ÙÊÃ,- ¼Öì ì §¾¨ ¨ ¨Ä¡É ¾¡Ð - ôð¿û - ûÇ Ì Ê¿Ê, ÄüÜö Ð÷¿¡üÈö þøÄ¡Ð þÕóÀÐö Ä¡Ð ¿òÄ¡É ¿Äì ö.
- ¿Ê Ä¡íÁî ¾¨ ¨ Äò¾î ì ö Ó¨È¿û:-**
- ¿ÄÐ þøÄí ¿Çø Ì Ê¿Äø Ì §Ç¡ïý - À\$Ä¡¿À¾ý ã ÄÓö, ¿f' Âì | ¿¾¶¨¨ ¨ ¨ÄôÀ¾¡Öö, ¿f' Ä ÄÊ¿î Ä¾¡Öö, ¿Ê Ä¡íÁî ¾¨ ¨ Äò¾î ì ¿ÓÊÖö. \$ÄÖö ¿¡ö Å°¶ ì ö Â¶ ÄüÜö |¾Öì ¿Çø - ûÇ ¿Æ× ¿f' Ä « ¿üÜÄ¾¡Öö, Ì Ê¿Ê Ì ¶¡ö ¿Çø ¿Äì ¿¡ø¾î ôÀ¾ý ã Äö¾î ì ¿ÓÊÖö.

¿Ê ±ùÂ¡ | ÈøÄ¡õ Ä¡ÍÄÍ ¿ÏÈÉ?

- Í ¿¡¾¡ÄÄüÈ Ä´ ¿Äø ¿Ê´ ÄÍ §°ÁòÐ ´ Äò¾ø
- ¿Êø ÄÄ°¡Äì ¿Æ× ¿ü ¿ÄòÄ¾¡ø
- ¿Êø |¾¡Æü°¡´ Äì ¿Æ× ¿ü ¿ÄòÄ¾¡ø
- ¿Êø °¡ì ´ ¼ ¿Ê ¿ÄòÄ¾¡ø

Ä¡Ð ¿òÄ¡É ¿Ê ±ÿÄÐ:-

§¿¡ö ¿ÖÄ¿ü « üÈ,Í´ ÄÔ¾ÿ ÜÊÄ,- ¼Öì §¾´ ÄÄ¡É ¾¡Ð - ôò¿ü - üÇ Ì Ê¿Ê,ÄüÜö Ð÷¿¡üÈö þøÄ¡Ð þÖòÄÐö Ä¡Ð ¿òÄ¡É ¿Äì ö.

¿Ê Ä¡ÍÄÍ ¾´ Äò¾Î ì ö Ó´È¿ü:-

¿ÄÐ þøÄÍ ¿Çø Ì Ê¿Êø Ì §Ç¡¡ÿ - Ä§Ä¡¿Ä¾ÿ ã ÄÓö, ¿Ê´ Äì | ¿¡¾¿ ´ ÄòÄ¾¡Öö, ¿Ê´ Ä ÄÊ¿Ô Ä¾¡Öö,¿Ê Ä¡ÍÄÍ ¾´ Äò¾Î ì ÖÊÖö. §ÄÖö ¿¡ö Ä° ò ÄÊ ÄüÜö |¾Öì ¿Çø - üÇ ¿Æ× ¿Ê´ Ä « ¿üÜÄ¾¡Öö, Ì Ê¿Ê Ì Ê¡ö ¿Çø ¿Äì ¿Äø¾Î ôÄ¾ÿ ã Äö¾Î ì ÖÊÖö.

¿Ê ±ùÂ¡ | ÈøÄ¡õ Ä¡ÍÄÍ ¿ÏÈÉ?

- Í ¿¡¾¡ÄÄüÈ Ä´ ¿Äø ¿Ê´ ÄÍ §°ÁòÐ ´ Äò¾ø
- ¿Êø ÄÄ°¡Äì ¿Æ× ¿ü ¿ÄòÄ¾¡ø
- ¿Êø |¾¡Æü°¡´ Äì ¿Æ× ¿ü ¿ÄòÄ¾¡ø
- ¿Êø °¡ì ´ ¼ ¿Ê ¿ÄòÄ¾¡ø

Ä¡Ð ¿òÄ¡É ¿Ê ±ÿÄÐ:-

§¿¡ö ¿ÖÄ¿ü « üÈ,Í´ ÄÔ¾ÿ ÜÊÄ,- ¼Öì §¾´ ÄÄ¡É ¾¡Ð - ôò¿ü - üÇ Ì Ê¿Ê,ÄüÜö Ð÷¿¡üÈö þøÄ¡Ð þÖòÄÐö Ä¡Ð ¿òÄ¡É ¿Äì ö.

¿Ê Ä¡ÍÄÍ ¾´ Äò¾Î ì ö Ó´È¿ü:-

¿ÄÐ þøÄÍ ¿Çø Ì Ê¿Êø Ì §Ç¡¡ÿ - Ä§Ä¡¿Ä¾ÿ ã ÄÓö, ¿Ê´ Äì | ¿¡¾¿ ´ ÄòÄ¾¡Öö, ¿Ê´ Ä ÄÊ¿Ô Ä¾¡Öö,¿Ê Ä¡ÍÄÍ ¾´ Äò¾Î ì ÖÊÖö. §ÄÖö ¿¡ö Ä° ò ÄÊ ÄüÜö |¾Öì ¿Çø - üÇ ¿Æ× ¿Ê´ Ä « ¿üÜÄ¾¡Öö, Ì Ê¿Ê Ì Ê¡ö ¿Çø ¿Äì ¿Äø¾Î ôÄ¾ÿ ã Äö¾Î ì ÖÊÖö.

¿Ê ±ùÂ¡ | ÈøÄ¡õ Ä¡ÍÄÍ ¿ÏÈÉ?

- Í ¿¡¾¡ÄÄüÈ Ä´ ¿Äø ¿Ê´ ÄÍ §°ÁòÐ ´ Äò¾ø
- ¿Êø ÄÄ°¡Äì ¿Æ× ¿ü ¿ÄòÄ¾¡ø
- ¿Êø |¾¡Æü°¡´ Äì ¿Æ× ¿ü ¿ÄòÄ¾¡ø
- ¿Êø °¡ì ´ ¼ ¿Ê ¿ÄòÄ¾¡ø

Ä¡Ð ¿òÄ¡É ¿Ê ±ÿÄÐ:-

§¿¡ö ¿ÖÄ¿ü « üÈ,Í´ ÄÔ¾ÿ ÜÊÄ,- ¼Öì §¾´ ÄÄ¡É ¾¡Ð - ôò¿ü - üÇ Ì Ê¿Ê,ÄüÜö Ð÷¿¡üÈö þøÄ¡Ð þÖòÄÐö Ä¡Ð ¿òÄ¡É ¿Äì ö.

¿Ê Ä¡ÍÄÍ ¾´ Äò¾Î ì ö Ó´È¿ü:-

¿ÄÐ þøÄÍ ¿Çø Ì Ê¿Êø Ì §Ç¡¡ÿ - Ä§Ä¡¿Ä¾ÿ ã ÄÓö, ¿Ê´ Äì | ¿¡¾¿ ´ ÄòÄ¾¡Öö, ¿Ê´ Ä ÄÊ¿Ô Ä¾¡Öö,¿Ê Ä¡ÍÄÍ ¾´ Äò¾Î ì ÖÊÖö. §ÄÖö ¿¡ö Ä° ò ÄÊ ÄüÜö |¾Öì ¿Çø - üÇ ¿Æ× ¿Ê´ Ä « ¿üÜÄ¾¡Öö, Ì Ê¿Ê Ì Ê¡ö ¿Çø ¿Äì ¿Äø¾Î ôÄ¾ÿ ã Äö¾Î ì ÖÊÖö.

**¿Ê ±ùÂ¡ | ÈøÄ¡õ Ä¡íÁî ¿ÿÈÉ?**

- í ¿¼¡ÃÄüÈ Å'' Â¸ ¿Ê' Áî §°ÁòÐ '' Åð¾ø
- ¿Ê¸ Ä!Å°¡Àì ºÆ× ¿û ºÄôÀ¾¡ø
- ¿Ê¸ |¾¡Æü°¡'' Äì ºÆ× ¿û ºÄôÀ¾¡ø
- ¿Ê¸ °¡ì ,'' ¼ ¿Ê ºÄôÀ¾¡ø








**Ä¡Ð ¿¡øÄ¡É ¿Ê ±ýÀÐ:-**

§¿¡ö ¿ÕÄ¿û « üÈ,í'' ÅÔ½ý ÙÊÂ,- ¼Öì ì §¾'' ÅÄ¡É ¾¡Ð - ôð¿û - ûÇ Ì Ê¿Ê,ÁüÜö Ð÷¿¡üÈö þøÄ¡Ð þÕôÀÐö Ä¡Ð ¿¡øÄ¡É ¿Äì ö.

**¿Ê Ä¡íÁî ¾'' Äð¾î ò ö Ó''È¿û:-**

¿ÁÐ þøÄí ¿Ç¸ Ì Ê¿Ê¸ Ì §Ç¡¡ý - À\$Ä¡¿À¾ý ä ÄÓö, ¿Ê' Äì |¿¼¶'' ÄôÀ¾¡Öö, ¿Ê' Ã ÄÊ¿î Å¾¡Öö,¿Ê Ä¡íÁî ¾'' Äð¾î ò ÖÊÖö. \$ÄÖö ¿¡ö Å°ñ ò õ ÄŒ ÁüÜö |¾Öì ¿Ç¸ - ûÇ ºÆ× ¿Ê' Ã « ¿üÜÄ¾¡Öö, Ì Ê¿Ê Ì æ¡ö ¿Ç¸ Äì ¿¡Ø¾î ôÀ¾ý ä Äö¾î ò ÖÊÖö.



<p>           ÅÂÛÚôŞÀî ì ù ù ì É            « ÈĖ Èċ ù Âî ÿ Å?         </p>	<p>           Åî ¼ð¾ÅĖð 2 ÅÅ¾Ė ĩ ù Åċ ×ð Åî ¾ð ÿ Å ²üĀ Ėð ù Ėð.         </p> <p>           ÅÂÛÚôŞÀî ì ±ñ Āð ā ñ Ú ¾¼ ÿ Åî ĩ ŞÁð ¾ñ ½Ě ŞÀî ý Ú ÅĀð ù Ąð¾ð. ÅĀĀî Ėð Âî ÿ °         </p> <p>           « øĀð ù îĀċ ù Āîð ù ì ½ôĀ ĩ õ.         </p> <p> <b>«ÈĖ Èċ ù:-</b> </p> <ul style="list-style-type: none"> <li>  ÅÂÛÚôĀ ĩ ¾Āð ÿ ùĊ ¾ ÿ ° ù Ċ ÿ ĀĖðð         </li> <li>  ÅÂÛÚĀĀċ         </li> <li>  Åî ó¾ċ         </li> <li>  ĩ Āð¾ð         </li> <li>  ù îĕ °ð         </li> <li>  Ş° ì ÷ ×         </li> <li>  ÅÂÛÚ ÿ òĀ°ð         </li> </ul>
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ÅÄÜÓÔ\$Àì ù ù ì É

ÅÖðÐÅ Ó´ È ù Ä´ Å?

ÅÖðÐÅ Ó´ È ù :-

- òð ò÷ì ù ´ Ä ù ´ Å°ø ¼Äì ò¼ø:-

- òð ò÷ì ù ´ Ä ù ´ Å°ø ù Ä´ Å´ Å ñ í ù Äð¼ø ORS ±ý Ú | °ìøÄ÷.þÐ « ÄÍ ñ ÄðÀ ÄüÜð Ð´ ½  
Í ù ù ¼ì Ä´ ÅÄí ù ÇÖð,ÅÖðÐÅ´ É ÄüÜð ÅÖð ù ´ ¼ ù Çø ù ´ ¼ì ù ÈÐ. - òð ò÷ì ù ´ Ä ù ´ Å´ Äð | ÄüÜ  
Í ò¼Äì É Äì ò¼Äð¼ø 1 Äð¼÷ ¼ñ ½¼ø ù Äì ù \$Åñ Í ò.þð | ÄìøÐ Äìø ù ì ö ù ÈÇ°ì Ú ,ÄÆî°ì Ú ,ÄüÜð  
ò÷ì ù ´ Ä ù Äì ù Ü¼ì Ð.¿ý Èì ù Äì ù Çì Æó´ ¼ ù Üìì ù ò ã Äð | ù Ì ù \$Åñ Í ò.ÄìøÈø ÄÄýÄì ò¼  
Ü¼ì Ð.

✚ - òð ò÷ì ù ´ Ä ù ´ Å°ø ù Ä´ Å´ Å | ù Ì òÄ¼ùì Óý ñ í ù ù Ì Æó´ ¼Äý ÅÄð,±´ ¼ì Ì ù üÈì Ü\$Äìø  
| ù Ì ù \$Åñ Í ò ±ý Ä¼ìø « Ö ù Ç ÄÖðÐÅ´ Ä « Ü ù Ç | ù Ì òÄð « Å°Äð.Ì´ ÈÄì ù \$Äì  
« øÄð « ¼ø Äì ù \$Äì | ù Ì ò¼ìø Ì Æó´ ¼ ù Üìì ù ÄýÄ´ Ç× ù ñ ¼ì ò.

✚ Ì Æó´ ¼ ù Üìì « ¼ø « Ç× ¿Æ | ù Ì ù \$Åñ Í ò

✚ ¿ì÷ òðÐ Ì´ ÈÄì¼ - ½× Ä´ ù ´ Ç ±Ì òÐ | ù ÜÇ \$Åñ Í ò

✚ Ì Ç÷Äì É Ä´ ù ´ Ç ÅÄÜÓÔ\$Àì ù ý \$Äìø ¼Ä÷ ù \$Åñ Í ò.

ÅÂÛÜô\$Àìì ù ù ì É Àý

Å ¸ Ç × ù ù Ì ¸ Å?

¸ ¸ Åì ö Î ù ì ö î ° ø ± ý Æ Ð

± ý É ?

¸ ¸ Åì ö Î ù ì ö î ° Ò ì ù ì É

« È ð È ¸ ù ù Ì ¸ Å?

Àý Å ¸ Ç × ù ù :-

ÅÂÛÜô\$Àìì ù ù ì É ì ø Å Ë ñ ¼ ° Ò Á ð

° ð ¼ î ° ð Ð Æ ù È ì ì ¸ È

ÅÂÛÜ - ò Å ° ò

° Ò ù ù Æ ù ù Ì ¾ ò Ò

í Ò Æ ò ¸ ø é ò Æ ò Æ ° ¸ Ñ < ò Æ Ç â ¸ ñ Í Ñ Ý ² Æ Ù è 7

2. ¸ ¸ Åì ö Î ù ì ö î ° ø :-

Ì î ° Å Ê Å ± ñ ½ ù È ¸ ¸ ° Þ ¸ Æ ù ù ¼ ý Ù Ê Å , ° ì ø \$ À ì É ø Æ ¸ ¸ ¼ ò Å ¸ ± ý Ù ò Æ ì Ì È ì Æ ì ã Æ ò Þ ó \$ Ì ì ö \$ ¾ ì ý Ù ù Æ Ð . Þ ó ¾ ù Ò Å Æ ì É Ð - ½ × ò Æ ì ¸ ¾ Å Æ Æ ì ¸ - ù \$ Ç ì ° ý Ù Ì ¼ ø Æ ì ¸ ¾ ¸ Å « ¸ ¸ ¼ ó Ð Ì ¼ Ò Ì Æ ì ¾ ¸ ¸ Å ² ù Æ Ì ò Ð ù Æ Ð .

« È ð È ¸ ù :-

¸ ¸ Åì ö Î ù ì ö î ° Æ ì ø Æ ì ¾ ù ò Æ ¼ Ì Æ ó ¸ ¾ ù Ì Ì ¸ ¸ Åì ö Î ù ì ö î ° ø ã ý Ù « ø Æ Ð Ì ì ý Ì Æ ì Æ ò ¾ ù Ì \$ Å Æ ì Þ Ò ò ¾ ø , ÅÂÛÜ Æ Æ , Æ ì ó ¾ , ÅÂÛÜ ô \$ À ì Ì , - ¼ ø \$ ° ì ÷ × , Æ ° Æ ý ¸ Å , Ì Ì È ð Ð È ò Ò

<p> <math>\frac{1}{4}A_i\ddot{o}\hat{I}</math> <math>\hat{A}\ddot{O}\hat{D}\hat{A}</math> <math>\acute{O}''\ddot{E}_{\text{u}}</math> <math>\hat{A}_i''\hat{A}?</math> </p>	<p> <math>\hat{I}''\ddot{E}\frac{3}{4}\varnothing</math>, <math>\S\frac{3}{4}i\varnothing</math> <math>\circ\hat{O}\hat{A}\hat{o}</math> <math>\hat{A}_i\frac{3}{4}\hat{O}</math> <math>\hat{A}\hat{I}\frac{3}{4}\varnothing</math>, <math> \frac{3}{4}i\frac{1}{4}\div\hat{I}''\hat{O}\hat{A}_i\hat{E}</math> <math>\text{ }_{\text{u}}i\hat{o}\hat{I}''\varnothing</math> <math>\S\hat{A}_i\text{y}\hat{E}</math> <math>\ll \hat{E}\hat{I}\hat{E}\text{ }_{\text{u}}\text{ }_{\text{u}}\frac{1}{2}\hat{o}\hat{A}\hat{I}\hat{o}</math>. <math>(\hat{I}\frac{1}{4}\hat{u}\hat{A}\hat{I}\frac{3}{4}\hat{A}\varnothing</math> <math>\hat{A}\hat{I}\text{ }_{\text{u}}\acute{O}\hat{o}</math>, <math>\hat{O}\hat{n}\text{ }_{\text{u}}\hat{U}\hat{o}</math> <math>\S\frac{3}{4}i\text{y}\hat{U}\frac{3}{4}\varnothing</math>, <math>\hat{A}\hat{n}\frac{1}{2}\hat{A}\varnothing</math> <math>\hat{A}\hat{I}\text{ }_{\text{u}}\acute{O}\hat{o}</math>, <math> \hat{E}\hat{O}\hat{A}\hat{O}\hat{o}\frac{3}{4}\hat{i}\text{ }_{\text{u}}\circ\hat{A}\hat{o}\hat{O}\hat{O}\hat{u}\hat{C}\hat{t}\text{ }_{\text{u}}\ll \hat{E}\hat{A}\hat{A}\hat{u}\hat{E}\varnothing</math> <math>\S\frac{3}{4}i\text{y}\hat{U}\frac{3}{4}\varnothing</math>. </p> <p> <b><math>\S\hat{Z}_i\ddot{o}\hat{A}\hat{A}\times\frac{3}{4}\varnothing:-</math></b> </p> <p> <math>\text{ }_{\text{u}}\frac{1}{4}\hat{A}_i\ddot{o}\hat{I}\text{ }_{\text{u}}i\hat{o}\hat{I}''\varnothing</math> <math>\S\hat{Z}_i\hat{A}_i\hat{E}\hat{D}\hat{A}_i''\frac{1}{4}\hat{o}\frac{3}{4}\hat{Z}\hat{E}</math> <math>\hat{A}\hat{u}\hat{U}\hat{o}</math> <math>- \frac{1}{2}\hat{A}\text{y}</math> <math>\hat{a}\hat{A}\hat{A}_i\text{ }_{\text{u}}\times\hat{o}</math> </p> <p> <math>\text{ }_{\text{u}}\frac{1}{4}\hat{A}_i\ddot{o}\hat{I}\text{ }_{\text{u}}i\hat{o}\hat{I}''\varnothing</math> <math>\S\hat{Z}_i\hat{A}_i\varnothing</math> <math>\hat{A}_i\frac{3}{4}\hat{O}</math> <math>\hat{A}\hat{o}\frac{1}{4}\hat{A}\div</math> <math>\hat{O}\frac{3}{4}i\hat{I}\text{ }_{\text{u}}\hat{A}_i\text{ }_{\text{u}} \circ\hat{A}\varnothing\hat{A}\hat{o}\hat{I}</math> <math>\text{p}\hat{A}\div\text{ }_{\text{u}}\hat{a}\hat{A}\hat{A}_i\text{ }_{\text{u}}\times\hat{o}</math> </p> <p> <math>\text{ }_{\text{u}}\text{ }_{\text{u}}^{\text{®}} \hat{A}_i\ddot{o}\hat{o}\frac{3}{4}-\frac{1}{2}\times\hat{o}</math> <math> \hat{A}_i\hat{O}\hat{D}\text{ }_{\text{u}}\hat{a}\hat{A}\hat{A}_i\text{ }_{\text{u}}\times\hat{o}</math> <math>\text{p}\hat{o}\S\hat{Z}_i\ddot{o}\hat{A}\hat{A}\times\text{ }_{\text{u}}\hat{E}\hat{D}</math>. </p> <p> <b><math>\hat{A}\ddot{O}\hat{D}\hat{A}</math> <math>\acute{O}''\ddot{E}_{\text{u}}:-</math></b> </p> <ul style="list-style-type: none"> <li> <math>\text{ }_{\text{u}}\hat{I}\hat{C}\hat{t}\hat{Z}\hat{t}\varnothing</math> <math>\hat{o}\frac{3}{4}\frac{1}{4}\hat{o}</math> <math> \text{ }_{\text{u}}i\hat{I}\text{ }_{\text{u}}\S\hat{A}\hat{n}\hat{I}\hat{o}</math> </li> <li> <math>\hat{A}\hat{u}\text{ }_{\text{u}}\hat{C}\hat{I}\hat{I}\hat{o}\frac{3}{4}\hat{o}</math> <math> \circ\hat{o}\hat{A}\S\hat{A}\hat{n}\hat{I}\hat{o}</math> </li> <li> <math>\text{ }_{\text{u}}\hat{I}\hat{E}\hat{o}''\frac{3}{4}\hat{U}\hat{i}\hat{I}\text{ }_{\text{u}}\S\frac{3}{4}''\hat{A}\hat{A}_i\hat{E}</math> <math>\ll \hat{C}\times\frac{3}{4}\hat{n}\frac{1}{2}\hat{E}</math> <math> \text{ }_{\text{u}}i\hat{I}\text{ }_{\text{u}}\S\hat{A}\hat{n}\hat{I}\hat{o}</math> </li> <li> <math>\text{ }_{\text{u}}\circ i\hat{A}\hat{t}\text{ }_{\text{u}}\varnothing\frac{3}{4}-\frac{1}{2}\times\hat{A}''\text{ }_{\text{u}}\hat{C}</math> <math> \text{ }_{\text{u}}i\hat{I}\text{ }_{\text{u}}\S\hat{A}\hat{n}\hat{I}\hat{o}</math> </li> <li> <math>\varnothing\hat{E}\hat{i}\text{ }_{\text{u}}\frac{1}{2}^2&lt;\text{y}\hat{A}^2\text{ }_{\text{u}}''\sim\hat{A}\text{y}\hat{E}</math> </li> </ul> <p> <math>\S\hat{Z}_i\hat{O}\hat{u}\hat{E}\hat{A}''\hat{A}\hat{o}\frac{3}{4}\hat{E}\text{ }_{\text{u}}\hat{A}\hat{o}\hat{A}\hat{I}\hat{o}\hat{D}\frac{3}{4}\varnothing</math>, <math>\text{ }_{\text{u}}\hat{i}\text{ }_{\text{u}}\hat{C}\hat{t}\hat{A}\hat{O}\hat{o}\hat{D}\hat{A}_i\hat{D}\text{ }_{\text{u}}\hat{o}\frac{3}{4}\varnothing</math>, <math>\hat{I}\text{ }_{\text{u}}\frac{3}{4}i\hat{A}\hat{A}_i\hat{E}</math> <math>- \frac{1}{2}\times\hat{o}</math> <math>\hat{A}\hat{E}\hat{i}\text{ }_{\text{u}}\hat{o}\text{ }_{\text{u}}\hat{E}\hat{O}\hat{A}''\hat{E}\hat{o}</math> <math>\hat{A}\hat{A}\text{y}\hat{A}_i\hat{o}''\frac{1}{4}\hat{I}\text{ }_{\text{u}}\frac{3}{4}i\hat{A}\hat{A}_i\hat{E}</math> <math>\acute{O}''\hat{E}\hat{A}\varnothing</math> <math>\hat{A}_i\hat{A}\hat{A}_i\hat{o}\frac{3}{4}\varnothing</math> <math>\hat{a}\hat{A}\hat{A}_i\text{ }_{\text{u}}\times\hat{o}</math> <math>\text{p}\hat{o}\S\hat{Z}_i\ddot{o}\hat{A}\hat{A}\hat{A}_i\hat{A}\varnothing\frac{3}{4}\hat{I}\hat{i}\hat{o}</math> <math>\hat{A}\hat{E}\text{ }_{\text{u}}\neg\hat{i}\hat{o}</math>. </p>
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<p> <math>\cdot \cdot \frac{1}{4} \hat{A}_i \ddot{o} \hat{T} \quad \cdot \cdot \ddot{o} \hat{T} \circ \hat{A} \hat{E}_i \varnothing</math>  <math>\hat{z} \ddot{u} \hat{A} \hat{T} \quad \ddot{o} \quad \hat{A} \hat{y} \quad \hat{A} \hat{c} \cdot \cdot \hat{C} \times \cdot \cdot \hat{u}</math>  <math>\hat{A}_i \cdot \cdot \hat{A}?</math> </p> <p> <math>! \dagger \hat{o} \hat{A} \cdot \cdot \frac{1}{4} \ddot{o} \hat{E} \hat{S} - \pm \pm \hat{y} \hat{A} \hat{D}</math>  <math>\pm \hat{y} \hat{E}?</math> </p> <p> <math>! \dagger \hat{o} \hat{A} \cdot \cdot \frac{1}{4} \ddot{o} \hat{E} \hat{S} - \pm</math>  <math>\ll \hat{E} \hat{d} \quad \hat{E} \hat{c} \cdot \cdot \hat{u} \quad \hat{A}_i \cdot \cdot \hat{A}?</math> </p>	<p> <math>\hat{A} \hat{y} \quad \hat{A} \hat{c} \cdot \cdot \hat{C} \times \cdot \cdot \hat{u}:-</math> </p> <ul style="list-style-type: none"> <li>➤ <math>\hat{a} \hat{i} \hat{i} \hat{i} \hat{i} \quad \hat{A} \varnothing \quad \hat{S} \hat{z}_i \ddot{o}</math></li> <li>➤ <math>\hat{i} \quad \frac{1}{4} \varnothing \quad \hat{D} \cdot \cdot \hat{C} \quad \hat{S} \hat{z}_i \ddot{o} \quad \hat{z} \ddot{u} \hat{A} \hat{T} \quad \frac{3}{4} \varnothing</math></li> <li>➤ <math>\hat{p} \frac{3}{4} \hat{A} \ddot{o} \frac{3}{4} \varnothing \quad \hat{A}_i \frac{3}{4} \hat{o} \hat{o} \quad \hat{z} \ddot{u} \hat{A} \hat{T} \quad \frac{3}{4} \varnothing</math></li> <li>➤ <math>\hat{z} \hat{A} \ddot{o} \hat{o} \cdot \cdot \hat{u} \quad \hat{A}_i \frac{3}{4} \hat{o} \hat{o} \quad \ll \quad \cdot \cdot \frac{1}{4} \frac{3}{4} \varnothing</math></li> <li>➤ <math>\hat{O} \hat{E} \quad \cdot \cdot \frac{3}{4} \varnothing \times \cdot \cdot \frac{1}{2} \hat{o} \hat{A} \hat{T} \quad \ddot{o}</math></li> </ul> <p> <math>! \dagger \hat{o} \hat{A} \cdot \cdot \frac{1}{4} \ddot{o} \hat{E} \hat{S}.^2 :-</math> </p> <p> <math>! \dagger \hat{o} \hat{A} \cdot \cdot \frac{1}{4} \ddot{o} \hat{E} \hat{S}.^2 \quad \pm \hat{y} \hat{A} \hat{D} \quad \cdot \cdot \hat{O} \hat{A} \hat{c} \cdot \cdot \hat{C}_i \varnothing \quad \cdot \cdot \hat{o} \hat{A} \hat{A} \hat{o} \quad \hat{A}_i \frac{3}{4} \hat{o} \cdot \cdot \hat{A} \quad \hat{z} \ddot{u} \hat{A} \hat{T} \quad \ddot{o} \hat{D} \cdot \cdot \hat{E} \hat{D}.</math> </p> <p> <math>\ll \hat{E} \hat{d} \quad \hat{E} \hat{c} \cdot \cdot \hat{u}:-</math> </p> <p> <math>\hat{A} \hat{T} \quad \circ \hat{u} \quad \hat{z} \hat{E} \quad \hat{S} \frac{3}{4}_i \varnothing \quad \hat{A} \ddot{u} \hat{U} \ddot{o} \cdot \cdot \hat{n} \quad , \hat{A} \hat{A} \ddot{o} \cdot \cdot \hat{C} \hat{A} \hat{n} \quad \hat{S} \hat{A}_i \varnothing \quad \cdot \cdot \frac{1}{2} \hat{o} \hat{A} \hat{T} \quad \ddot{o} , \hat{A} \circ \hat{A} \hat{y} \cdot \cdot \hat{A} , \quad \hat{A}_i \hat{o} \frac{3}{4} \varnothing , \quad \cdot \cdot \ddot{o} \hat{T} \circ \varnothing , \quad \hat{a} \quad \ddot{o} \hat{T} \quad \hat{A} \hat{A} \hat{c} ,</math>  <math>\circ \hat{u} \hat{z} \hat{E} \quad \hat{z} \hat{E} \ddot{o} \quad \hat{A}_i \hat{U} \frac{3}{4} \varnothing</math> </p>
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<p>   † ôÀ'' ¼ðÊŠ - ± ÁÕðÐÅ  Ó'' È,û Â¡'' Å? </p> <p>   † ôÀ'' ¼ðÊŠ - ± ²üÀÎ õ  ÀŸ Å'' Ç×,û Â¡'' Å? </p> <p> Å¡ó¼ŧŠÀ¼ŧ ±ýÀÐ ±ýÉ? </p>	<p> <b>ÁÕðÐÅ Ó'' È,û:-</b> </p> <ul style="list-style-type: none"> <li>❖   Æó'' ¾,Üìì °¡ŧÅŧ,ŧ - ½× Å'' ,,, Ç  ,¡Î ì, §Åñ Î õ</li> <li>❖ ø È ì</li> <li>❖ ¾Éŧ'' ÁôÀÎ òÐ¾ø « Å°ŧÃõ</li> <li>❖ Í ò¾Á¡, pÕò¾ø §Åñ Î õ</li> <li>❖ ÁÕóÐ,Á¡ò¾ŧ'' Å,û - ð  ,¡ÜÇ §Åñ Î õ</li> <li>❖ §Œ¡ÂŸ ¾ý'' Á'' Âô  À¡ÕòÐ ,øÄÄø Á¡üÜî °ŧ,ŧ'' °  °öÂ §Åñ Î õ.</li> </ul> <p> <b>ÀŸ Å'' Ç×,û</b> </p> <p> ÅÈñ ¼ °ÕÃõ, ,øÄÄø òüÜ §Œ¡ö, ,øÄÄø À¼ŧò òüÀÎ òÐ¾ø. </p> <p> <b>4.Å¡ó¼ŧŠÀ¼ŧ-</b> </p> <p> Å¡ó¼ŧŠÀ¼ŧ ±ñ ÀÐ ÅÂüÜòŠÀ¡ì ì §Œ¡ö:pÐ Å°¡ŧ°¡ ±ýÈ À¡ì È¡ŧÅ¡ÅÉ¡ø ²üÀÎ ,ŧÐ. </p>
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<p> <math>\hat{A}_i \circ \frac{3}{4} \hat{S} \hat{A} \frac{3}{4} \hat{A} \hat{y} \ll \hat{E} \hat{d} \hat{E} \hat{c} \hat{u}</math>  <math>\hat{A}_i \hat{y} \hat{A}?</math> </p> <p> <math>\hat{A}_i \circ \frac{3}{4} \hat{S} \hat{A} \frac{3}{4} \hat{A} \hat{y} \hat{A} \hat{O} \hat{d} \hat{D} \hat{A}</math>  <math>\hat{O} \hat{y} \hat{E} \hat{c} \hat{u} \hat{A}_i \hat{y} \hat{A}?</math> </p> <p> <math>\hat{A}_i \circ \frac{3}{4} \hat{S} \hat{A} \frac{3}{4} \hat{A} \hat{E} \hat{j} \hat{o} \hat{z} \hat{u} \hat{A} \hat{I} \hat{o}</math>  <math>\hat{A} \hat{y} \hat{A} \hat{y} \hat{C} \times \hat{u} \hat{A}_i \hat{y} \hat{A}?</math> </p> <p> <math>\hat{z} \hat{f} \hat{E} \hat{j} \hat{o} \hat{A} \hat{A} \hat{A} \hat{i} \hat{U} \hat{E} \hat{A}</math>  <math>\hat{S} \hat{z} \hat{i} \hat{o} \hat{y} \hat{C} \hat{o} \hat{A} \hat{I} \hat{i} \hat{o}</math>  <math>\hat{O} \hat{y} \hat{E} \hat{c} \hat{u} \hat{A}_i \hat{y} \hat{A}?</math> </p>	<p> <math>\ll \hat{E} \hat{d} \hat{E} \hat{c} \hat{u}:-</math>  <math>\hat{A} \hat{A} \hat{u} \hat{U} \hat{o} \hat{S} \hat{A} \hat{i} \hat{i} \hat{l} - \ll \hat{j} \hat{c} \hat{o} \frac{3}{4} \hat{n} \frac{1}{2} \hat{E} \hat{S} \hat{A} \hat{j} \hat{o} \hat{y} \frac{1}{2} \hat{o} \hat{A} \hat{I} \hat{o}, \hat{A} \hat{E} \hat{n} \frac{1}{4} \hat{o} \hat{O} \hat{A} \hat{o}, \hat{A}_i \hat{o} \frac{3}{4} \hat{c}</math> </p> <p> <math>\hat{A} \hat{O} \hat{d} \hat{D} \hat{A} \hat{O} \hat{y} \hat{E} \hat{c} \hat{u}:-</math> </p> <ul style="list-style-type: none"> <li> <math>\hat{z} \hat{f} \hat{E} \hat{o} \hat{y} \frac{3}{4} \hat{U} \hat{i} \hat{l} \frac{3}{4} \hat{n} \frac{1}{2} \hat{E} \hat{S} \hat{A} \hat{i} \hat{i} \hat{l} \hat{y} \hat{S} \hat{A} \hat{n} \hat{I} \hat{o}.</math> </li> <li> <math>\hat{y} \hat{y} \frac{1}{2} \times \hat{i} \hat{l} \hat{o} \frac{3}{4} \hat{o} \ll \hat{A} \hat{o} \hat{A} \hat{o}.</math> </li> <li> <math>\hat{z} \hat{o} \hat{A} \hat{y} \frac{1}{2} \times \hat{A} \hat{y} \hat{y} \hat{y} \hat{C} \hat{S} \hat{A} \hat{i} \hat{i} \hat{l} \hat{y} \hat{S} \hat{A} \hat{n} \hat{I} \hat{o}.</math> </li> </ul> <p> <math>\hat{A} \hat{y} \hat{A} \hat{y} \hat{C} \times \hat{u}:-</math> </p> <ul style="list-style-type: none"> <li> <math>\checkmark \hat{c} \hat{U} \hat{z} \hat{A} \hat{o} \hat{A} \hat{o} \frac{3}{4} \hat{y} \frac{1}{4} \hat{o}.</math> </li> <li> <math>\checkmark \hat{N} \hat{y} \hat{A} \hat{A} \hat{A} \hat{o} \hat{A} \hat{i} \hat{o} \hat{y} \frac{1}{2} \hat{o} \hat{A} \hat{I} \hat{o}.</math> </li> </ul> <p> <math>\hat{z} \hat{f} \hat{E} \hat{j} \hat{o} \hat{A} \hat{A} \hat{A} \hat{i} \hat{U} \hat{E} \hat{A} \hat{S} \hat{z} \hat{i} \hat{o} \hat{y} \hat{C} \hat{o} \hat{A} \hat{I} \hat{i} \hat{o} \hat{O} \hat{y} \hat{E} \hat{c} \hat{u}:-</math> </p> <ul style="list-style-type: none"> <li> <math>\checkmark \hat{A} \hat{i} \hat{D} \hat{y} \hat{o} \hat{A} \hat{i} \hat{E} \hat{z} \hat{f} \hat{A} \hat{i} \hat{l} \hat{E} \hat{i} \hat{y} \hat{S} \hat{A} \hat{n} \hat{I} \hat{o}.</math> </li> <li> <math>\checkmark \hat{A} \hat{A} \hat{o} \hat{y} \hat{E} \hat{o} \frac{3}{4} \hat{A} \hat{y} \hat{y} \hat{y} \hat{y} \hat{y} \hat{y} \hat{C} \hat{S} \hat{o} \hat{i} \hat{o} \hat{y} \hat{A} \hat{A} \hat{y} \hat{A} \hat{I} \hat{o} \frac{3}{4} \hat{l} \hat{o} \frac{3}{4} \hat{o} \hat{y} \hat{o} \frac{3}{4} \hat{o} \hat{S} \hat{A} \hat{n} \hat{I} \hat{o}.</math> </li> <li> <math>\checkmark \hat{y} \hat{y} \frac{1}{2} \times \hat{o} \hat{y} \hat{A} \hat{i} \hat{O} \hat{o} \hat{y} \hat{C} \frac{3}{4} \hat{E} \hat{o} \hat{D} \hat{y} \hat{A} \hat{i} \hat{y} \hat{A} \hat{o} \hat{a} \hat{E} \hat{y} \hat{A} \hat{i} \hat{y} \hat{S} \hat{A} \hat{n} \hat{I} \hat{o}.</math> </li> </ul>
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- ✓  $| \check{A} \check{C} \check{S} \check{A} | ^{\circ} \emptyset \check{O} \check{o} \check{S} \check{A} \check{i} \check{D} \text{ } _{j} \check{A} \frac{1}{2} \check{t} \text{ } _{j} \check{C} \ll \frac{1}{2} \check{t} \check{o} \check{D} | ^{\circ} \emptyset \check{A} \check{S} \check{A} \check{n} \hat{\text{I}} \check{o}.$
- ✓  $\check{\text{I}} \check{S} \check{C} \check{i} \check{j} \check{Y} \check{\text{I}} \check{o} \frac{3}{4} \check{t} \text{ } _{j} \check{q} \text{ } _{j} \check{o} \check{A} \check{\theta} \frac{1}{4} \check{\text{I}} \check{E} \check{z} \check{f} \check{A} \check{o} \check{A} \check{A} \check{y} \check{A} \check{\text{I}} \check{o} \frac{3}{4} \check{S} \check{A} \check{n} \hat{\text{I}} \check{o}.$
- ✓  $\text{ } ^{-} \frac{1}{2} \check{A} \check{\emptyset} ^{\text{®}} | \check{A} \check{i} \check{o} \check{o} \check{A} \text{ } _{j} \frac{3}{4} \check{o} \frac{3}{4} \check{A} \check{t} \text{ } _{j} \check{S} \check{A} \check{n} \hat{\text{I}} \check{o}.$
- ✓  $^{\circ} \check{i} \check{A} \check{t} \text{ } _{j} \check{t} \text{ } ^{-} \frac{1}{2} \times \check{A} \text{ } _{j} \text{ } _{j} \check{C} | \text{ } _{j} \check{\text{I}} \text{ } _{j} \check{S} \check{A} \check{n} \hat{\text{I}} \check{o}$
- ✓  $\check{S} \check{z} \check{i} \check{o} \pm \frac{3}{4} \check{t} \text{ } \check{o} \check{D} \check{A} \check{i} \check{o} \frac{3}{4} \check{t} \text{ } _{j} \check{A} \text{ } _{j} \check{C} \check{A} \check{O} \check{o} \check{D} \check{A} \check{i} \check{Y} \ll \check{U} \check{A} \frac{3}{4} \check{O} \frac{1}{4} \check{y} \text{ } ^{-} \check{\theta} | \text{ } _{j} \check{u} \check{C} \check{S} \check{A} \check{n} \hat{\text{I}} \check{o}$
- ✓  $\emptyset \check{E} \check{i} \text{ } ^{-} \frac{1}{2} \text{ } ^2 < \check{Y} \check{A} \text{ } ^2 \text{ } ^{-} \text{ } ^{-} \check{A} \check{Y} \check{E}$
- ✓  $\check{\text{I}} \check{o} \frac{3}{4} \check{A} \check{i} \check{E} \text{ } _{j} \check{A} \check{t} \text{ } _{j} \check{E} \text{ } _{j} \check{C} \check{o} \check{A} \check{A} \check{y} \check{A} \check{\text{I}} \check{o} \frac{3}{4} \check{t} \check{A} \check{A} \check{o} \text{ } _{j} \frac{3}{4} \check{o} \check{A} \check{i} \check{D} \text{ } _{j} \check{o} \check{A} \check{i} \check{E} \check{O} \text{ } _{j} \check{E} \check{A} \check{\emptyset} \ll \text{ } _{j} \check{u} \check{E} \check{S} \check{A} \check{n} \hat{\text{I}} \check{o}.$
- ✓  $\frac{3}{4} \check{y} \check{\text{I}} \check{o} \frac{3}{4} \check{o}$
- ✓  $\frac{3}{4} \hat{\text{I}} \check{o} \check{D} ^{\circ} \text{ } ^{\circ} \check{t} \check{A} \check{i} \check{O} \check{o} \check{D} \text{ } _{j} \check{C} \check{\text{I}} \check{A} \check{o} \text{ } _{j} \frac{3}{4} \text{ } _{j} \check{U} \text{ } _{j} \check{\text{I}} \text{ } _{j} \frac{3}{4} \check{A} \check{E} \check{j} \check{A} \check{\emptyset} \check{S} \check{A} \check{i} \frac{1}{4} \check{S} \check{A} \check{n} \hat{\text{I}} \check{o}.$
- ✓  $\check{A} \check{O} \check{o} \check{D} \check{A} \check{o} \check{A} \check{i} \check{S} ^{\circ} \check{i} \frac{3}{4} \text{ } _{j} \check{E} | ^{\circ} \check{o} \frac{3}{4} \check{\emptyset}, \check{O} \check{i} \text{ } _{j} \check{A} \check{A} \check{i} \text{ } _{j} \check{A} \check{o} \text{ } _{j} \frac{3}{4} \text{ } _{j} \check{U} \check{S} \check{z} \check{i} \check{O} \check{u} \check{E} \check{S} \check{A} \check{i} \check{D} \check{p} \check{A} \check{o} \frac{3}{4} \check{o} \check{A} \check{i} \check{S} ^{\circ} \check{i} \frac{3}{4} \text{ } _{j} \check{E} , \check{A} \check{A} \check{o} \check{A} \check{i} \check{S} ^{\circ} \check{i} \frac{3}{4} \text{ } _{j} \check{E} | ^{\circ} \check{o} \check{D} | \text{ } _{j} \check{u} \check{C} \check{S} \check{A} \check{n} \hat{\text{I}} \check{o}.$
- ✓  $\check{\text{I}} \check{A} \check{o} \text{ } _{j} \frac{3}{4} \text{ } _{j} \check{C} \frac{3}{4} \check{E} \check{t} \text{ } _{j} \check{A} \check{o} \check{A} \hat{\text{I}} \check{o} \check{D} \frac{3}{4} \check{\emptyset} \ll \check{A} \text{ } ^{\circ} \check{A} \check{o}, \check{p} \check{D} \text{ } ^{-} \check{O} \check{\text{I}} \check{A} \check{o} \text{ } _{j} \frac{3}{4} \check{A} \text{ } \frac{1}{4} \check{A} \check{O} \check{o} \check{D} \check{A} \check{u} | \check{E} \check{i} \check{O} \check{\text{I}} \check{A} \check{o} \text{ } _{j} \frac{3}{4} \check{A} \text{ } \frac{1}{4} \check{o} \check{A} \check{A} \check{i} \check{A} \check{\emptyset} \check{p} \check{O} \check{o} \check{A} \frac{3}{4} \check{u} \check{\text{I}} \text{ } ^{-} \frac{3}{4} \times \text{ } _{j} \check{E} \check{D}.$
- ✓  $\text{ } _{j} \check{A} \check{t} \times \check{o} | \check{A} \check{i} \check{O} \check{\theta} \text{ } _{j} \check{C} \check{A} \check{i} \check{D} \text{ } _{j} \check{o} \check{A} \check{i} \check{E} \check{O} \text{ } _{j} \check{E} \check{A} \check{\emptyset} \ll \text{ } _{j} \check{u} \check{E} \check{S} \check{A} \check{n} \hat{\text{I}} \check{o}.$
- ✓  $\text{ } ^{*} \check{Y} \check{i} \check{A} \text{ } ^{-} \check{C} \check{t} \text{ } _{j} \check{A} \check{o} \check{A} \check{A} \check{y} \check{A} \check{\text{I}} \check{o} \frac{3}{4} \check{t} \frac{3}{4} \check{n} \frac{1}{2} \check{f} \text{ } _{j} \check{A} \hat{\text{I}} \check{\text{I}} \check{o} \frac{3}{4} \check{o} | ^{\circ} \check{o} \check{A} \check{S} \check{A} \check{n} \hat{\text{I}} \check{o}.$
- ✓  $\check{A} \check{D} \check{E} \check{\emptyset} \check{A} \check{E} \text{ } _{j} \check{\theta} \hat{\text{I}} \check{o} \text{ } _{j} \check{O} \check{A} \check{t} \text{ } _{j} \check{A} \text{ } ^{-} \check{A} \check{S} \check{A} \check{i} \text{ } _{j} \check{S} \check{A} \check{n} \hat{\text{I}} \check{o}.$

¿É ¡ Ø À Ã Ä Ì Ù Ê Â

§¿iö, Ùì ,iÉ¾Î ôò ° °ç

ÁÕóĐ, û Â; `` Å?

¾Î ôò ° °¢ÁÕóĐ, û:-

## 1. Ân Ûô ŞÀ; ì Ì :-

$\S\tilde{A} \vdash \partial \S \frac{1}{4} \vdash \tilde{A} \quad \tilde{S} \pm \tilde{y} \tilde{E} \tilde{A} \tilde{O} \tilde{o} \tilde{D} \mid \mid \mid \tilde{I} \mid \mid \mid \tilde{o} \tilde{A} \tilde{I} \mid \mid \mid \tilde{D} \mid \mid \mid \tilde{S} \tilde{Z} \tilde{i} \tilde{o} \tilde{3} \tilde{A} \tilde{I} \mid \mid \mid \tilde{o} \tilde{D} \tilde{A} \tilde{O} \tilde{o} \tilde{D} \mid \mid \mid \tilde{I} \mid \mid \mid \tilde{S} \tilde{A} \tilde{n} \tilde{E} \tilde{A} \tilde{A} \tilde{D} \pm \tilde{y} \tilde{E} \mid \tilde{A} \tilde{y} \tilde{E} \mid \partial \tilde{2}$   
 $\tilde{A} \tilde{D} \tilde{A} \tilde{I} \tilde{3} \tilde{4} \tilde{D} \tilde{3} \tilde{4} \tilde{O} \tilde{o}, 4 \tilde{A} \tilde{D} \tilde{A} \tilde{I} \tilde{3} \tilde{4} \tilde{D} \tilde{3} \tilde{4} \tilde{O} \tilde{o} \mid \mid \mid \tilde{I} \mid \mid \mid \tilde{S} \tilde{A} \tilde{n} \tilde{I} \tilde{o} \mid \mid \mid \tilde{p} \tilde{D} \tilde{p} \tilde{A} \tilde{n} \tilde{I} \tilde{3} \tilde{4} \tilde{A} \tilde{I} \tilde{I} \tilde{2} \tilde{C} \tilde{i} \mid \mid \mid \tilde{I} \mid \mid \mid \tilde{o} \tilde{A} \tilde{I} \mid \mid \mid \tilde{D} \mid \mid \mid \tilde{O} \tilde{3} \tilde{4} \partial$   
 $\tilde{3} \tilde{4} \tilde{A} \tilde{I} \tilde{I} \tilde{2} \mid \mid \mid \tilde{U} \tilde{A} \tilde{I} \tilde{A} \tilde{D} \tilde{3} \tilde{4} \tilde{A} \tilde{O} \tilde{o} \tilde{D} \tilde{A} \tilde{1} \tilde{2} \tilde{C} \mid \mid \mid \tilde{A} \tilde{n} \tilde{I} \tilde{A} \tilde{I} \tilde{A} \tilde{D} \tilde{3} \tilde{4} \tilde{U} \tilde{i} \tilde{U} \mid \mid \mid \tilde{I} \mid \mid \mid \tilde{S} \tilde{A} \tilde{n} \tilde{I} \tilde{o} \mid \mid \mid \tilde{p} \tilde{A} \tilde{n} \tilde{1} \tilde{4} \tilde{A} \tilde{D} \tilde{3} \tilde{4} \tilde{A} \tilde{I} \tilde{I} \tilde{2} \tilde{A} \tilde{3} \tilde{4} \tilde{E} \mid \tilde{U}$   
 $\tilde{A} \tilde{I} \tilde{A} \tilde{D} \tilde{3} \tilde{4} \tilde{U} \tilde{i} \tilde{U} \mid \mid \mid \tilde{S} \tilde{A} \tilde{I} \tilde{D} \tilde{E} \tilde{O} \tilde{i} \mid \mid \mid \tilde{S} \tilde{A} \tilde{n} \tilde{I} \tilde{o} \mid \mid \mid \tilde{p} \tilde{O} \tilde{A} \tilde{D} \tilde{3} \tilde{4} \tilde{C} \tilde{Z} \tilde{i} \tilde{y} \tilde{I} \tilde{A} \tilde{I} \tilde{A} \tilde{I} \mid \mid \mid \tilde{U} \tilde{i} \tilde{I} \tilde{S} \tilde{A} \partial \tilde{S} \tilde{A} \tilde{I} \tilde{A} \tilde{3} \tilde{4} \tilde{E} \mid \partial \tilde{A} \tilde{A} \tilde{y} \tilde{p} \partial \tilde{I} \tilde{A}.$

SĀjōS¼j |¼ì ±ýÈ ĀjōÄÊĀj , |, jî ì ,ôĀî õ ÁŌóĐ ā ý Ú ¾Ā¨ ½, Çj , |, jî î ,ôĀî , Đ.Ó¨ ÈĀj ,  
pĀñ î ,çj ýì , - ú ÅĐ Āj¾í , Çø |, jî î , SĀñ î õ.

2.  $\frac{1}{4} \hat{A}_i \hat{O}_i^\dagger \hat{A}_i \hat{O}_i^\dagger \hat{O}_i^\dagger \hat{O}_i^\dagger$

$\frac{1}{4} \tilde{A}_i \tilde{O} \tilde{I} \quad \frac{1}{2} \tilde{O} \tilde{I} \quad \tilde{O} \tilde{I} \quad \frac{1}{2} \tilde{E} \quad \frac{3}{4} \tilde{I} \quad \tilde{O} \tilde{I} \quad \tilde{A} \tilde{O} \tilde{O} \tilde{D} \quad \tilde{O} \tilde{I} \quad \tilde{E} \tilde{A}_i \quad \tilde{p} \tilde{A} \tilde{n} \quad \tilde{I} \quad \frac{3}{4} \tilde{O} \tilde{D} \quad \frac{1}{2} \tilde{O} \tilde{I} \quad \tilde{A} \frac{1}{2} \tilde{O} \tilde{I} \quad \tilde{A} \tilde{n} \quad \frac{1}{4} \tilde{A} \tilde{D} \quad \tilde{A} \tilde{A} \frac{3}{4} \tilde{O} \quad \frac{1}{2} \tilde{I} \quad \tilde{I} \quad \frac{1}{2} \tilde{A} \tilde{n} \quad \tilde{I} \quad \tilde{O}.$

### 3. | † ðÄ´ ¼ðÊŠ.² :-

ŞŁİö ¾Î òÐ ÁÕó¾ÉİĐ 6ÅĐ Á¾ð¾ÄÖóĐ Ä¾Çİ É ð¼ÅĐ Á¾ð¾Üİ ù İİİ ŞÅñ Î ò.

### 4. Åİó¾ÇŞÄ¾Ç-

İÄÄİ ŞŁİö ¾Î òÐ ÁÕó¾ÉİĐ ã ý Ú ÄÄ¾Ç İİİ ŞÅñ Î ò.

### ÓÊ×´ Ä:-

"ŞŁİöŞİÊ ŞŁİöÓ¾ÇŞİÊ « Đ¾½Çİ Ì Ò

ÄİÄŞİÊ ÄİöðÄÎ İ°Äø"

ŞŁİö ÞýÉ İ¾ýÚ Ñ ÄİöóĐ,ŞŁİÄý İ½ö Ñ ÄİöóĐ « ´¾ð¾½Çİ Ì Ò ÄÊ´ ÄÖö Ñ ÄİöóĐ, ´¼Öİ İ  
İÄİÖóĐöÄÊÄİ ÄÖóĐ ÄÊİ¾ ŞÅñ Î ò.

"İð¾ö İö¾Öö" Þ¾ý ã Äö ŞŁİÄøÄİ Äİüİ´´ Äö İÄÊÄİö.

Çİý ã Äö Ñİ×ö ÓÊÖö,« Êİ×ö ÓÊÖö

« öÄİ ´ÖŞÄİ Êó´¾Äý ÄöİÄİÄ°¼ö.

ÇÊ Äİüİ´İİ ±üÄÇ× Öİ¼ŞÄİ « Ş¾ŞÄİøİ Êó´¾Äý ÄÇ÷îÇİ İ¾Äý ÄİÇöðÄİ Öİ¼Äö.

¾İöÄİ÷,ŞÇİ Êó´¾Üİİ ŞŁİö ±ýÊ¾´¼İø´Ä« üÊ"ŞŁİÄøÄİ Äİü× ±ýÊ İüÊİİİÊ´ Ä  
Şİöİ ÄÊ"

"İ Êó´¾Äý ÇÄò¾ ŞÄ½ÇİİöŞÄİö,ŞŁİÄøÄİ Þó¾Ä Ş¾ð´¾ Ñ ÖÄİİİ ŞÄİö!".

## நீர் மாசுபடுதல்



நீரில் தொழிற்சாலைக் கழிவுகள் கலப்பதால்



சுகாதாரமற்ற வகையில் நீரைச் சேமித்து வைத்தல்

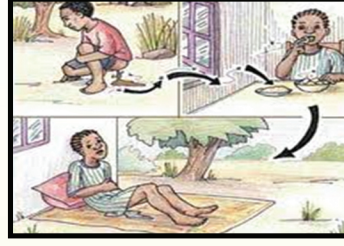


நீரில் விவசாயக் கழிவுகள் கலப்பதால்



நீரில் சாக்கடை நீர் கலப்பதால்

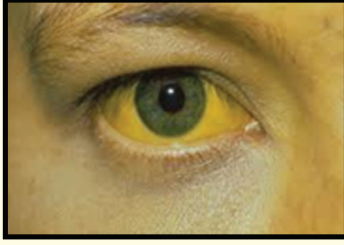
## நீரினால் பரவக்கூடிய நோய்கள்



வயிற்றுப் போக்கு



டைபாய்டு



ஹெப்படைட்டிஸ்



வாந்திபேதி

## நீரினால் பரவக்கூடிய நோய்கள் ஏற்பட காரணங்கள்



சுற்றுச் சூழல் மாசுபாடு

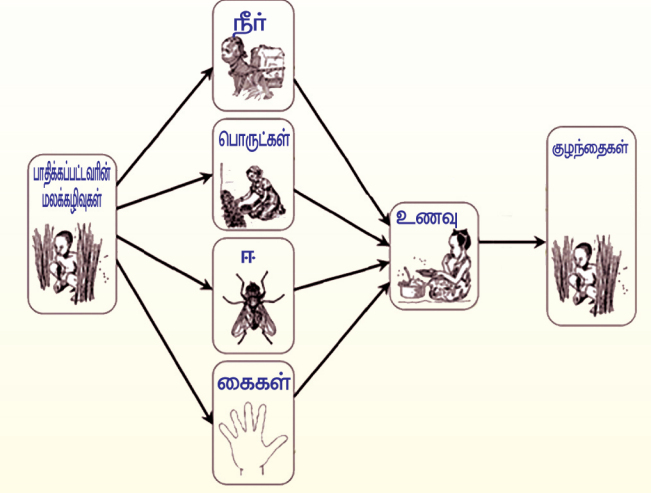


சுகாதாரமற்ற கழிவறையை உபயோகித்தல்



சுத்தமில்லாத உணவு

## நோய் பரவும் வழிகள்:



## நோயிற்கான அறிகுறிகள்



வயிற்றுப்போக்கு



வாந்தி



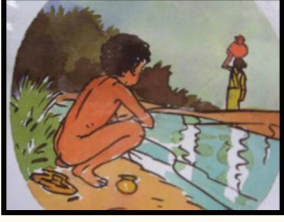
சோர்வு



காய்ச்சல்



நீரினால் பரவக்கூடிய நோய்களைத் தடுக்கும் முறைகள்



சுத்தமான நீர் நிலைகளிலிருந்து  
நீரை சேகரித்தல்



கொதிக்க வைத்த நீரை வடிகட்டி  
குடிக்கக் வேண்டும்



குளோரின் சுத்திகரிக்கப்பட்ட  
குடிநீரைப் பயன்படுத்த வேண்டும்.



மலம் கழித்த பின் கை,கால்களை  
சோப்பை பயன்படுத்தி சுத்தம் செய்தல்



உணவில் ஈ மொய்ப்பதைத்  
தவிர்க்க வேண்டும்



கழிவுப் பொருட்களை பாதுகாப்பான  
முறையில் அகற்ற வேண்டும்



சுத்தமான கழிவறைகளைப்  
பயன்படுத்தி மலத்தைப் பாதுகாப்பான  
முறையில் அகற்ற வேண்டும்.



உணவுப் பொருட்களை திறந்து  
வைக்காமல் மூடி வைக்க வேண்டும்.



தன் சுத்தம்



வெளியே செல்லும் போது  
காலணிகளை அணிந்து செல்ல வேண்டும்.



தடுப்பு ஊசி மருந்துகளை  
குழந்தைகளுக்கு தவறாமல்  
போட வேண்டும்

குழந்தைகள் நலம் கருதி வெளியிடுவோர்

**K. மகேஸ்வரி**

சமூக நலத்துறை முதுகலை இரண்டாம் ஆண்டு மாணவி

தீருமதி. **P. உமாமகேஸ்வரி** M.Sc.(N)

தலைவர், சமூக நலத்துறை

சக்தி செவிலியர் கல்லூரி, ஓட்டன்சத்திரம்.

நோய்நீர் வாழ்வே! குறைவற்ற செல்வம்!!

தெரிந்து கொள்வோம்! தடுத்திடுவோம்!!  
காத்திடுவோம்!!!



நீரின்றி அமையாது இவ்வுலகு!  
நீ இன்றி அமையாது அம்மா!!

கருவறையில் நீரினுள் சிசு உதைக்கும்  
உணர்வை அறிய முடிந்த தாயிற்கு  
சிறு அறையில் நீரினால் ஏற்படும் நோயால்  
சிசு அமும் உணர்வை அறிவாயா!

குழந்தையின் நலத்தைப்

பேணிக்காப்போம்!

நோயில்லா எதிர்காலத்தை

உருவாக்குவோம்!!